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ABSTRACT

Project activities involved: (1) examination of exploratory measures of social incompetency of junior high school adolescents, (2) development and trial of educational units designed in response to problems in black urban schools, and (3) a compilation and review of cross-sectional Test of Social Inference (TSI) data. Extensive test data was obtained from junior high school students and teachers in two white semi-rural and two predominantly black urban schools. Examination of teacher "labelling" of students as socially incompetent (SI) using behavior descriptions and checklist responses revealed considerable individual arbiter idiosyncrasy. In the semi-urban schools, means for students consensually identified as SI were lower on all experimental tests, outside school activity reports, and home interview ratings and also lower with respect to academic and socio-economic measures. In the urban schools, behavior problem students scored lower on nearly all measures of social awareness, school attitudes, self-concepts, social relations with respect to various groups, classroom teacher ratings and interview reports, and school record comments and file data. Statistical analysis revealed a general nonrelatedness among sets of variables and lack of simplified factor structure. (Author/BJG)

SIGNIFICANT FINDINGS

Project activities involved (1) an examination of exploratory measures of social incompetency of junior high school adolescents, including an examination of teacher criteria for identifying social incompetency, (2) development and trial of educational units designed in response to problems in black urban schools, and (3) a compilation and review of cross-sectional Test of Social Inference (TSI) data from EMR samples, including further development of that test or similar testing procedures for other adolescent populations.

Examination of teacher labelling of their students as socially competent or incompetent revealed (1) considerable retest stability in labelling, (2) wide inter-teacher differences in student identifications, (3) both inter- and intra-teacher variability concerning reasons for labelling, (4) lack of support for "intentionality" as a factor in judging incompetence, and (5) different teacher behavior emphases introduced by checklist content. The latter finding points to a confounding effect of method upon the arbiter's judgments; his descriptions of students are in part a function of the experimenter's procedures. More generally, the examination of labelling behavior reveals considerable individual arbiter idiosyncrasy. In identifying the socially incompetent, examining the arbiter's personal emphases and using multiple judges are to be recommended.

Major products of the project are the several experimental tests developed and trial tested and the adaptations of additional, already existing experimental tests for use in the project testing program. In addition to the extensive social competency behavior checklist (PSIC), these tests include group measures for describing student social relations (in terms of how he regards others, how he is regarded by others, his apperception of how he is regarded by others, and his accuracy in stating these expectations), his social inferential skills, his information regarding others, his school attitudes, and his self-concept as a student. In addition, classroom teacher rating formats and home interview schedules were developed. Though perhaps requiring specific modifications for particular investigator needs, these several measurement procedures should be of use for further studies in the general domain of student adaptiveness and social competency.

Analysis of extensive test, rating, and interview data conceptually related to social incompetency revealed a factorially complex structure. Social incompetency is simply not definable as a particular co-related set of undesirable behaviors. The appellation "socially incompetent" may be earned by display of any of a host of independent deficit skills or detrimental actions. Though group scores on various measures of socialization, school achievement, classroom behavior, and attitudes toward school and

self are likely to be poorer for persons identified as less socially competent, many of the members of these groups may be expected to earn above average scores on these measures. And persons earning poorer scores on one social competency measure well may not earn lower scores on a second or third competency measure.

Due to disrupting problems during the trials of the educational units, the possible effectiveness of the proposed unit activities remains to be demonstrated. Improved development of the unit to better cope with these problems is recommended before further trial.

Review of the extensive TSI data documents the serviceability of the TSI as a widely tested and psychometrically sound instrument for assessing inferential skills of adolescent retardates. Alternate short forms developed for the TSI should add to its usefulness in the field.

Final Report

Project No. 15-P-55298/0-03

MEASUREMENT OF SOCIAL INCOMPETENCY IN ADOLESCENTS

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University of Oregon
September, 1972

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PREFACE

Teachers, rehabilitation workers, placement personnel, in effect, all persons working with socially and vocationally unsuccessful youth, have become increasingly aware of the importance of appropriate social behaving for the maintenance of productive, satisfying societal activity. The problem is clearly a national one, important to rehabilitation-retraining centers in all sections of our country. Without argument, more effective preventative and rehabilitative training programs for improving social behaving are needed. And the need is for high school and junior high school youth as well. The school and neighborhood environments of our youth are surely the nurturing places for adult social behaviors.

This project was generated in response to that need, in particular, to study social incompetency at the junior high school age level. As stated in the project proposal, the starting focus for the project was "increased understanding and more adequate measurement of social competency". Two populations were to be studied, a seventh and eighth grade population of students attending non-urban, white community schools and similar age adolescents attending predominantly black city schools.

But the project focus on measurement was clearly not to be an end in itself but important only as it would broaden understanding and suggest direction for remediation. Accordingly, a final project task was the development and tryout of an experimental unit designed for teaching social comprehension and self-modulation skills in the public schools.

And a further project task was the examination and further development of the Test of Social Inference (TSI) for measuring the ability of retardates to appropriately interpret social cues. Because of the procedural separateness of this further task, the TSI examination is reported as a separate addendum to the final project report.

The final project report is the record of our project activities covering a three year period, in essence a statement of what was done, what data we have collected, and our analyses and interpretations of that data. We have provided extensive descriptions of our procedures and tools that others may extend and/or improvise from.

In writing this final report, an attempt was made to make each section somewhat self-sustaining. In particular, for want of better condensation, some of the end of section summaries are repeated in the summary section VI. It is hoped this will aid rather than distract the reader of this rather bulky report.

ACKNOWLEDGMENTS

A number of persons have contributed in various capacities and for varying periods to our project activities. Dr. Barbara Edmonson advised in preparing the original project proposal and served as senior research associate and project codirector during the first two years of project activity. Unfortunately, her project tenure ended prior to the writing and trial of the experimental units. Dr. Helen Simmons was acting project director during most of the 1969-70 academic year, and Dr. James L. Parker worked with her in developing a conceptual definition of social incompetency. Dick Genardi, Ken Smith and Ardelle Slater were project research assistants during that same period.

Karen Morris served as initial data analyst for the spring 1970 test data. Mira Savara assisted Dr. Edmonson with the further TSI testing in the fall of 1970 and worked with Valerie Grobe in administering TSI short forms and again with Bob Short on the development of the Picture Interpretation Test administered the subsequent year. Carol Bloch and Drew Rudgear were project assistants responsible for the winter 1971 home interview data.

Diane Johnston was actively associated with nearly all data planning, collection, analysis, curriculum planning and tryouts, and write-up phases. Her continuing research contributions and administrative support deserve special mention, as do those of Dr. Isabelle Littman, who took on the onerous responsibility for the fall and winter testing program in the Portland schools.

Dr. Michael C. Holen contributed extensively to the analysis and write-up of the TSI data. Dr. S. David Farr and Dick Genardi served as data analyst specialist and as computer programmer, respectively, for the multivariate analysis of the Portland data, Connie Sakamoto assisting. Project formulation and direction profited from continued supportive interaction with Dr. Oren Glick (University of Puget Sound, Tacoma). Additional project consultants were Drs. Henry Leland (The Ohio State University) and Alfred J. Butler (University of Wisconsin).

Special technical assistance was received from the staffs of two Portland educational television studios. The Northwest Regional Educational Laboratory initially advised us regarding videotaping operations, and the Portland School District One Instructional Television studio in Eliot School was utilized in preparing the students' videotape vignettes--the excellent cooperation and help of these two staffs in our undertaking is most appreciated.

A major word of appreciation is due the cooperating school personnel of the Bethel and Elmira, Oregon, junior high schools, the Portland Area III Research Office, and the Boise and Sabin Elementary School personnel in Portland. And our very special thanks to the over five hundred adolescents and nearly 100 teachers and parents who provided our project data.

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ABSTRACT

Project activities involved (1) examination of exploratory measures of social incompetency of junior high school adolescents, (2) development and trial of educational units designed in response to problems in black urban schools, and (3) a compilation and review of cross-sectional Test of Social Inference (TSI) data from EMR samples.

Extensive test data was obtained from over 300 junior high school students and 50 teachers in two white semi-rural and two predominantly black urban schools. Examination of teacher "labelling" of students as socially incompetent (SI) using behavior descriptions and checklist responses revealed considerable individual arbiter idiosyncrasy. In the semi-urban schools, means for students consensually identified as SI were lower on all experimental tests, outside school activity reports, and home interview ratings. However, SI's were also lower with respect to academic and socio-economic measures.

In the urban schools, behavior problem students scored lower on nearly all measures of social awareness, school attitudes, self-concepts, social relations with respect to various referent groups, classroom teacher ratings and interview reports, and school record comments and file data.

However, low inter-instrument correlations were obtained. Canonical correlational and principal component factor analyses of these data revealed a general nonrelatedness among sets of variables and lack of simplified factor structure.

Trial runs were made in two of the urban classes of two project-developed experimental educational units, the first involving a ten week cooperative production activity, and the second an eight week videotaping of student social experiences. Due to disrupting problems, neither experimental unit was implemented as intended, voiding evaluative description. Revisions are recommended for both units.

Review of the extensive TSI data documents the serviceability of the TSI as a widely tested and psychometrically sound instrument of assessing inferential skills of adolescent retardates. Alternate short forms of the TSI were developed.

Section 1

INTRODUCTION

A. Background

Historically, social incompetence has been studied from a variety of perspectives. Most frequently the term has been used in reference to maladaptive behavior, inappropriate and unacceptable acts. Persons otherwise defined as mentally retarded, neurotic, psychotic, delinquent, and culturally disadvantaged have all been also cited for social incompetence. More recently, "problem" groups such as the culturally alienated and active reformists have been included. Generally, it might be said that to the extent that an individual behaves, or is believed to behave, contrary to the preferences of his society and to the extent that his behavior is considered inappropriate, he will qualify for the label of "socially incompetent".

The major effort of the project to be described in this report was directed toward improved understanding of social incompetency in junior high school populations. Educators, parents, and other community lay persons alike have repeatedly expressed concern for the seemingly increasing evidences of problem youth in the schools, youngsters who were indequately responding to the demands of their school environments. The problem posed for this project was the measurement of social incompetency, the delineation of variables related to problem behavior in the school setting.

In common parlance, social incompetency simply refers to not doing the right things. But which things and how many? And by what criteria or by whose judgment?

Though the label "social incompetency" continues to be both popularly and professionally used, few writers have insisted on sorting through the implied meanings and underpinnings of this common label. Parker's (1970) development of a conceptual framework for examining social incompetence initiated as part of an initial project review[1], notes four important embodied concepts, that of the arbiter[2], the actor, his acts, and a judgment of the inappropriateness and/or unacceptability of the acts committed by that actor. Essentially he proposed that social incompetency is an interaction phenomenon involving two major components, the behavior of a person and a valuing, judgmental response of some arbiter to that stimulus behavior. He further suggested that the social incom-

[1]Though Dr. James Parker's return to Australia at the commencement of the first project data collection phase prohibited close continued collaboration and expansion of his research, parts of his emphasis on arbiter judgment have been absorbed into the initial project efforts. A synthesis of his research review and study is presently being prepared for publication.

[2]Though there are other possible connotations of an arbiter, in this report an arbiter of behavior is simply any person who makes or has the potential for making a labeling response of "socially incompetent" with respect to a behavior or person.

petence judgment itself is a function of the interaction of two variables--the degree of unacceptability of a behavior to an arbiter, or group of arbiters, and the rate of occurrence of the behavior.

In reviewing the classification and measurement of social incompetence, Parker notes that the evaluation focus was typically limited to subject behaviors apart from explicit considerations of the "desirability" or "undesirability" of his behavior. This latter dimension, though logically critical to measuring incompetency, appears to be at best subsumed by most investigators. Parker views the labeling response "socially incompetent" as an arbiter's valuing response of disapproval, inappropriateness, or unacceptability contingent upon the stimulus behavior of an actor. His study focused on an examination of that judgment as it relates to the arbiter's rated degree of unacceptability of a behavior and to the frequency of perceived occurrence of that behavior. He proposed "apparent intentionality" as a further dimension of socially incompetent behavior, in the sense that arbiters would rate behaviors which they perceived as intentional as more unacceptable than those they considered unintentional.

His study dealt with three sets of arbiters, 40 parents, 40 adolescents, and 24 counselors, all of whom described a listing of over 200 behaviors according to their acceptability-unacceptability and the frequency of occurrence at which each behavior would become intolerable. Contrary to expectations of a negative relationship, these two descriptions were found to be generally unrelated for his arbiters. Anticipated arbiter differences in ranking the unacceptability of the various behaviors, however, were obtained as were differences indicating that the apparent intentionality of a behavior is an important determinant of the behavior's acceptability.

Though Parker's emphasis on the judgmental components governing the arbiter's labeling decision, and in particular, on the arbiter's personal valuing of the actors behaviors appears to be a productive focus for examining social incompetency, his data is limited to arbiter responses to an a priori behavior listing. An alternate emphasis would be on his second critical component of social incompetency, the actor himself, the person whose behavior is being judged. This focus would have the description of social incompetence begin with what the actor does. An advantage here is the experimental accessibility of the actor, the possibility of "arranging" to independently examine our arbiter's referent or, if the behavior is a non-repeatable event, to examine other behaviors of that same actor. This "advantage" was followed in the present study.

To begin with the actor is, in effect, to suggest that the definition of social incompetency resides in that set of acts (or some summary statement regarding them) which distinguishes between persons labeled socially competent and socially incompetent. This is a usage definition, that is, the meaning of the concept derives from its employment. By further examining those whom the arbiters have labeled,

we can possibly identify and verify additional parts of that definition. Hopefully our expanded definition of social incompetency will help to manifest the sustaining and/or causative factors and will increase our understanding of how we might remedially respond to the problem student. At the least, our procedure should clarify who it is who is labeled incompetent, what are his other weaknesses and strengths and how these interrelate. In judging social incompetency what other discriminations is our judge concomitantly (and probably inadvertently) making?

To proceed from the behaviors of the socially incompetent (and competent) it is first necessary to identify them, which in turn requires a prior selection of an arbiter of behavior. As earlier mentioned, Parker found that his arbiters differed as to the values they gave different behaviors. It is at least as likely that they would differ in labeling persons.[1]

Since our proposed study samples were to be junior high school age youngsters with the schools as our primary data collection centers, their teachers were selected as the principal arbiters for identifying our socially incompetent and socially competent "actors". Admittedly this primary decision risks introducing a special bias or exclusiveness to our study of social competency since teachers' perspectives may be expected to be somewhat different from those of non-school community persons or have limited extension beyond the school setting. However, as will be noted in the overview subsection and detailed in succeeding sections, additional "arbiter" sources were partially tapped during the course of the study. To preview our findings, the considerable inter-arbiter group consensus obtained from these sources suggests that our teachers' judgments of who were and who were not socially competent apparently have considerable generality to the non-school environment.

B. Overview of Project Report

The project proposal outlined a several-stage effort toward the measurement of social competency involving (a) identification of samples of socially competent and incompetent junior high school students, (b) obtaining self, peer, parent, and other adult evaluative descriptions of their behaviors in various environments, (c) adminstering experimental social interpretation and information tests to these students, and (d) revising the more manageable and promising data collection procedures for administration in urban schools enrolling students from predominately low income black families.

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[1] Since persons exhibit multiple behaviors and the arbiter will be making his own selection or weighing of these behaviors. To conclude in advance which behavior to judge would be a return to an arbiter rather than an actor focus.

In essence, what we were wanting to know was, what did socially incompetent adolescents do that their socially competent counterparts did not do; more particularly, what set them apart, how did they appear or conduct themselves which was different? Further, what of their knowledge, understanding, feelings, and attitudes which might be different from that of their more socially competent peers? Our long range focus was an identification of apparent causative and/or maintenance factors which might provide clues and direction for developing effective remedial classroom response. Our motivating conceptualization was that there indeed were identifiable and reversible determinants of social incompetency. We sought a broader data-based description of the socially incompetent as a starting place.

But the project proposal also moved beyond that starting place and called for exploratory development and trial of educational units to be designed in response to problems of social incompetency. These were to be conducted in the black urban schools. The experimental test data from control and trial classes were to provide evaluative data.

And finally the project proposal called for a compilation and examination of the extensive data from administrations of the Test of Social Inference to adolescent retarded populations and an exploration of further development of that test or of similar testing procedures for other adolescent populations.

The following four sections of this report describe the project activities supporting these proposed tasks (excepting the review of the TSI data which, because of its independence from the main project activities, is reported as a separate addendum). Sections II and III deal with data collection in two semi-rural white junior high schools located near Eugene, Oregon, the first examining the teacher as an arbiter of the social incompetency of her/his students and the second reporting the experimental testing of these students, including home interviews.

Section IV describes the Portland samples, the several tests administered, and the multivariate analyses made of these data. The development and trial of the two experimental educational units used in the Portland schools are described in Section V. The sixth and final section of the report reviews and summarizes the research findings. Testing instructions, format samples, and experimental tests used in the Eugene area and Portland schools are presented in the several appendices to the report.

The remaining pages of this introduction section present an overview of project activities as a procedural guide to the more detailed descriptions in Sections II, III, IV and V.

The study proceeded with an extensive examination of teacher identifications of socially incompetent (and competent) students in two small junior high schools of less than 500 students each, suburban to the city of Eugene, Oregon. Initial teacher nominations by 33 seventh and eighth grade teachers, each reviewing all the students in her classes provided a core ("consensus") sample of 67 socially incompetent (SI) students, 23 identified as especially or noticeably competent (NC), and 59 students drawn from the 80 percent middle, socially competent (SC) group. The retest stability of these teacher nominations was examined.

More intensive examinations of teacher nominating criteria were made, first, by soliciting free-response teacher behavioral descriptions of their nominated students, and second, from teacher responses regarding their nominees using a modification of Parker's 241-item Social Checklist Inventory (PSIC). Inter-teacher agreement and inter-instrument (free behavior description vs. behavior checklist responses) examinations were made as were comparisons of teacher responses made for their socially competent and socially incompetent nominees. Teacher use of intentional and unintentional PSIC items for these nominee groups was also examined.

Subsequent to the teacher nomination and description activities, several experimental test instruments were administered to the teacher nominated "consensual" sample of SI's, SC's and NC's. Due to the limited time available to the project for testing students, different subsamples of SI-SC-NC students received different experimental tests, few students receiving all the tests. The principal instruments used included (1) the Test of Social Inference (TSI) developed by Edmonson, et al. (1965), (2) a self-rating procedure extending the Recall Population procedures developed by de Jung (1967), providing self-rating of the student's knowledge concerning persons important to him and of these persons' social relations, (3) a Social Activity Questionnaire (SAQ) extending a daily activities report developed by Edmonson (1970) for community retardates, and (4) a home interview schedule administered to parents and students in individual sessions. Additional counselor reports and school record data were also obtained. These data were principally analyzed in terms of mean and frequency distribution comparisons among the SI, SC, and NC student groups, examining the general project hypotheses that socially incompetent students would score, or be reported, or report themselves less favorably on the several student descriptor measures.

The experimental measures used in the Eugene area schools were revised and expanded for group testing in a Portland schools sample comprised of the total eighth grade student populations in two urban elementary schools. Each school contained three eighth grade classes of approximately 28 students each, providing a total testing sample of 168 students. These two schools were located in predominately black sections of the city, one enrolling 98 percent and the second 75 percent of black students. Extensive test data was collected in these schools, including experimental measures of students' social awareness, school attitudes, self concept, and social relations with respect to various referent groups. These experimental measures were collected twice, early in the fall term and eleven weeks later.

Three sets of daily and weekly classroom teachers ratings of their student's classwork and behavior and social relations were also obtained for these eighth graders. School record data provided academic achievement scores, social report data, attendance records, and some home background data, both current and for prior terms. Additional teacher report data added to the students' record folder at end of the 1972 school year were also examined.

The data were analyzed first to examine consistency of the derived measures over the two and a half month retest interval and to determine possibilities for data reduction. The reduced data consisting of 47 student descriptor variables was then examined in terms of differences in means and frequency distributions of students dichotomized into a high behavior problem and a low behavior problem group on the basis of behavior descriptions of them obtained from teacher and unit leader interviews. Further analyses of the reduced data included a multivariate canonical correlation procedure permitting estimation of redundancy or variate reproducibility among selected subsets of student descriptors and a varimax principal factor solution obtained for 37 of these variables.

Section VI describes the development and trial run of two experimental educational units for developing group support and interaction skills and improved social understanding. These units were conducted in two of the six eighth grade classes involved in the Portland testing program. The first unit included a ten week cooperative production activity and the second an eight week videotaping of student social experiences. Due to uncontrolled class activities, neither experimental unit was implemented as intended, voiding evaluative description other than a general reporting of classroom activities during the trial period. Recommendations for improving the units are offered on the basis of these activities.

Section II

THE TEACHER AS ARBITER OF SOCIAL INCOMPETENCE

A. Teacher Nominations of Social Competence and Incompetence

1. Procedures. The project rationale for selecting teachers as the principal arbiters in identifying socially incompetent adolescents was presented in the previous section of this report. This section empirically examines the teacher as an arbiter in terms of his nominations, his behavior descriptions, and his checklist responses.

Two junior high schools, both in school districts adjacent to the more metropolitan environs of Eugene, Oregon, served as data sources for these examinations. School C is a three-year junior high school which had an enrollment of 451 pupils drawn from a predominantly blue-collar industrial section; of these, the 301 seventh and eighth graders were used for teacher nominations. School F is a two-year junior high school which had an enrollment of 302 pupils, all of whom were used for teacher nominations. This school is located in a lower-income rural area about 20 miles from Eugene.

After introductory contacts through the school administrators, 33 of the total teaching staff of 38 teachers directly involved with seventh and eighth graders in both schools agreed to participate in the first phase of project activity.

The first teacher task was identification of the more outstanding socially incompetent and socially competent students. Each teacher's individual nominating list was built from his class rosters and comprised the names of all those students enrolled in any of his current classes who were also enrolled in at least two other teachers' classes. With the exception of one special class teacher in each school who had only eight and eleven students respectively, teacher lists commonly contained between 50 and 150 names. The total number of student names on all teacher lists combined was 3,758; an average of 121 names per teacher, not counting the two small special class lists.

The nomination instructions to the teacher were kept relatively unstructured. Teachers were told to use their own, personal definitions of social competence, not to consider what some other teacher might say:

> There are some young people who are seen as behaving inadequately or inappropriately in society. They are regarded as "socially incompetent". We need your help in getting a comprehensive view of what social incompetence is.
>
> Below is a list of students whom you teach and/or with whom you have other contacts. Would you please look over the entire list and consider which of these students you would regard as "socially incompetent" by your own definition of social incompetence. As you read each name, place a check (✓) in front of it to indicate that you have not missed it. Then, indicate only those students whom you would regard as socially incompetent by writing SI in the column following the names(s) of the students you select. In the same manner, indicate those whom you would regard as noticeably socially competent by writing NC in the column following their names. If we have listed the name of an adolescent with whom you have no contact, draw a line through the name.

These lists were distributed to teachers in group meetings, one in each school. They completed the nominations at those meetings in 15 to 30 minutes, depending upon the length of their lists.

2. Distribution of Teacher Nominations. Most student names appeared on six or seven teacher lists. Ninety students were listed only five times and only 52 students, including nearly all the special education students, were listed four or even fewer times. Teachers on the average nominated approximately fourteen to twenty SIs and NCs, or approximately one-fourth of their pupils. For ease of reference, the non-nominated students will be designated SC, or socially competent. Implicit in this reference is a basic binary definition of socially competent persons, all those not singled out as incompefent.

Table 2.1 presents the total numbers and percentages of SI, SC, and NC identifications made by teachers in the two schools.[1] As is evident from the tabled entries, teachers in both schools were very nearly identical in the overall percentages of students they identified in the three competency categories.

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[1] In a strict sense the description "made by teachers" applies only to the SI and NC identifications; the SC identifications are operationally definable as the absence of either an SI or an NC nomination. For convenience of reporting, SC identifications will also be considered "made". The term "nominations" will be reserved for the judgmental response of checking or otherwise actively identifying a nominee.

Table 2.1

Numbers and Percentages of SI, SC, and NC Identifications Made by Teachers in Two Junior High Schools

	No. of Teachers	Teacher Identifications			
		SI N (%)	SC N (%)	NC N (%)	Total
School C	18	268 (14)	1396 (72)	285 (15)	1949
School F	15	280 (15)	1265 (70)	264 (15)	1809
Combined	33	548 (15)	2661 (71)	549 (15)	3758

Furtner, they made very nearly the same percentage (15) of nominations for the SI as for the NC categories. Considering that the average teacher nominating list had 121 names, this 15 percent figure translates to approximately 18 students identified as socially incompetent (SI) another 18 as noticeably competent (NC), and 80 unchecked students as socially competent (SC).

Though schools were found to be alike in terms of average teacher nomination behavior, there were considerable individual teacher differences. A listing of percentages of students identified by individual teachers as SI, SC, and NC is provided in Table 2.2. As may be seen from this table, the 33 participating teachers varied considerably in their nominating behaviors.

The two special class teachers with small enrollments and high nomination percentages, particularly for the socially incompetent category (62 and 36 percent of their students), considerably extended this variability, but even without these special class teachers, the percentages of SI nominations ranged considerably, from a low of 2 percent for a music teacher and a developmental reading teacher to highs of 27 and 24 percent for a Spanish teacher and a social studies teacher respectively. Similarly, percentages of NC nominations ranged from lows of 2 and 3 percent for the mathematics teachers in each school to high of 54 percent for a counselor-math-PE teacher, followed by 38 and 32 percent for a history-art teacher and a developmental reading teacher respectively. Differences between schools were minor, medians of 8 and 12 percent SI nominations for Schools C and F respectively and of 14 percent NC nominations in both schools. Nor did length of list appear to be related to percent of students nominated.

The considerable variance in individual teacher nominating behaviors evident in the Table 2.2 data operates against high teacher consensus in that occurences of the same student being nominated by all his teachers are limited by the infrequent nominations made by his most conservative (least nominating) teacher. A further problem is the disproportionate weight of the conservative teacher's nomination; only his nominees achieve consensus.

Table 2.2

Length of Nominating Lists and Percentages of SI and NC Nominations Made by 33 Participating Teachers

	Teacher Code	No. of Names on Nom. Lists	Percent SI	Percent NC
School C	1	158	16	32
	2	47	11	11
	3	86	2	13
	4	282	14	11
	5	52	2	10
	6	141	18	9
	7	147	9	15
	8	120	14	14
	9	168	10	8
	10	69	17	12
	11	151	26	2
	12	50	10	54
	13	97	20	31
	14	91	7	6
	15*	8	62	12
	16	70	4	16
	17	92	27	15
	18	120	7	17
School F	1	77	12	18
	2	119	20	24
	3	161	20	16
	4	79	22	14
	5	144	14	3
	6	189	13	8
	7	55	2	11
	8*	11	36	36
	9	90	12	9
	10	107	13	14
	11	149	21	9
	13	158	10	18
	14	166	16	38
	15	147	24	10
	16	157	8	8

*Special class teachers.

for the present project this problem is probably minor, however, since the project samples of SI's and NC's did not require all teachers to similarly nominate a student (see Section II.A.3. below).

Apart from the question of variability among teachers in the proportion of pupils they nominate for the SI and NC categories is the question of agreement among teachers as to which particular students they nominate. Though the Table 2.2 data describing teachers as differing widely both as to the number of students on their lists and the proportions of these students they nominated mitigates against very high inter-teacher agreement, considerable consensus in nomination was nevertheless achieved.

As has already been stated, most student names appeared on six or more different teacher lists. The distribution of students receiving varying numbers of SI or NC nominations on these lists is presented in Table 2.3.

Table 2.3

Numbers of Students Receiving Varying Frequencies of SI and NC Nominations

	Number of Nominations								Tot. No. Ss Rec'ing 1 or More Noms.
	0	1	2	3	4	5	6	7	
SI Nominations									
School C	171	68	30	13	4	8	4	3	130
School F	169	59	30	20	16	5	2	0	132
Combined	340	127	60	33	20	13	6	3	262
NC Nominations									
School C	156	80	28	18	8	6	2	3	145
School F	181	45	40	17	9	8	2	0	121
Combined	337	125	68	35	17	14	4	3	266

Three hundred and seventy pupils[1] (61 percent) were given the same identification by at least two of their teachers, 136 of these receiving SI nominations and 147 NC nominations. One hundred and twenty-nine different student names (roughly 21 percent) were consistently not checked either SI or NC by all teachers having these names.

[1]This figure cannot be read from Table 2.2 since also included here are consistently non-nominated students.

Much less frequent were instances of students receiving the same nominations from all of their teachers; only 18 students received SI nominations on every list on which their names appeared; no students consistently received NC nominations.

Considering the generally very long lists, it is perhaps unrealistic to expect very high consensus in nominations. Even so, 80 students received SI or NC nominations from more than three of their teachers may be noted in summing along the Table 2.3 rows.

The disagreement among teachers in nominations is most evident in instances of opposite nominations, that is, one or more of his teachers identifying a student as SI and one or more of his teachers identifying that same student as NC. Of the 3,758 names on the 33 teacher lists there were 53 instances (14 percent) of opposite nominations; however, these principally involved only a few of the teachers who apparently were using different classification criteria. These differences in teacher criteria will be commented upon in the following subsection.

3. Repeatability of Teacher Nominations. To examine the stability of the teacher-nominator performance, a random sample of one-third of the teachers were asked to redo their nominations 1 to 2 weeks following their initial nominations. The 12 renomination teachers were given fresh lists of their same students with the same nomination instructions. Their combined lists contained 1,300 student names. Slightly over 88 percent of these names were identically nominated (or not nominated) on the second administration. On none of the teachers' lists did a student change in nomination from an incompetent to a noticeably competent status or vice versa.

Since the 12 percent incidence of non-identical nominations is based on individual teacher nominations and involved only changes in the middle competency classification, it seems reasonable to presume an even higher stability (than 88 percent) for the multiple teacher nomination procedures used to select the socially competent-incompetent subjects for project study (see below).

4. Selection of Consensual Samples. In addition to examining teacher nominating agreement, another major project purpose for obtaining teacher nominations was to reduce the total student pool of 603 to a more workable sample of the more extreme and middle ground students with respect to perceived social incompetency.

In forming samples of SI, SC, and NC, only students appearing on a minimum of three teacher lists were considered. Though this restriction eliminated most of the special class students (typically these students had limited teacher contact other than with their special class teacher), multiple teacher consensus seemed essential to minimize idiosyncratic biasing effects of the nominator.

A further restriction was elimination of students with opposite nominations.

The remaining students were identified as "consensual" SI's or NC's if they had a minimum of two nominations in that category independent of the number of non-nominations they received. Sixty-seven students were thereby classified SI, all but six having three or more SI nominations. The average numbers of SI and NC nominations for these two groupings were 3.9 and 4.6, respectively.

From the remaining pool of 508 students, a random selection of 56 students having five or more SC identifications were selected for the "consensual" SC group. However, rather than to entirely exclude special class students, three special class students, two with only two SC identifications and one with four SC identifications, were included in the consensual SC group. The total SC group of 59 students had an average of 5.9 SC identifications per SC student.

Table 2.4 provides a description of the consensual SI, SC, and NC students according to school and sex. These 149 students constituted the test sample for all the experimental testing to be described in Section III.

Table 2.4

Number of Male and Female Consensual SI, SC, and NC Students Used For Experimental Testing

Sample	School	Number of Teacher Identifications Received							
		2	3	4	5	6	7	8	Total
SI	C	3/1	5/7	3/1	5/1	2/2	3/0		21/12
	F	0/2	8/1	8/8	1/4	1/1	--		18/16
	Comb.	3/3	13/8	11/9	6/5	3/3	3/0		39/28
SC	C	1/1		--	3/4	4/5	3/4	1/5	12/19
	F	--		0/1	6/1	8/7	3/2	--	17/11
	Comb.	1/1		0/1	9/5	12/12	6/6	1/5	29/30
NC	C		1/0	2/2	3/3	1/1			7/6
	F		--	0/1	2/5	0/2			2/8
	Comb.		1/0	2/3	5/8	1/3			9/14

Note: Entries to left of slashes are numbers of males, entries to right of slashes, number of females receiving identifications.

B. Teacher Behavior Descriptions.

1. Procedures. One week after completing their SI-NC nominations, teachers at each school received individually prepared packets containing behavior description sheets to be used for SI and NC students whom they had previously nominated.

These behavior description sheets consisted of several pages, each identified with the teacher's code, a student's name, and the nomination classification that teacher had given him. The rest of the page provided space for teachers to write spontaneous descriptions of behaviors exhibited by that student relating to the teacher's initial nomination of him. The teachers were given several days to return the SI-NC packet, after which they received a second packet containing description sheets for students categorized as SC, that is, neither nominated SI nor NC by them.

The behavior description sample of students was assigned to teachers so that each teacher would describe at least one student whom he had identified previously in each of the SI, SC, and NC categories. Further, only students consensually identified as either SI, SC, or NC were to be included, and all included SI and SC students were to appear on at least two teachers' lists. The fact that eight of the original nominating group of 33 teachers were unable to continue their participation at this point and the reasonableness of keeping teacher tasks to a maximum of ten student names precluded strict adherence to these criteria.

After-the-fact counts revealed that all but one of the participating 25 teachers described at least one student from each nominating category. A total of 121 of the 149 consensually identified students were included for behavior descriptions. In all, the 25 participating teachers completed 202 student descriptions, all but a few of these teachers describing eight or more students. The breakout and number of description sheets completed by the participating teachers is presented in Table 2.5. The row total for School C and the row total for the combined schools are reported as 62 and 121, respectively, instead of 71 and 230, since nine School C students appeared both as SI's and SC's on different teacher sheets, depending on how that teacher had earlier categorized him.

2. Analysis of Behavior Statements. Some 1,258 different behavior statements were collected from the 25 participating teachers describing the 121 students. These statements were first sorted by a project team into 80 groupings or kinds of similar behavior statements and then further collected under five major headings.

Statements were also classified as to negative or positive, that is, statements that a student performed a clearly desirable action or a clearly undesirable one.

Table 2.5

Number of Subjects Described and Number of Behavior Description Sheets Completed by School C and F Teachers

School	No. of Teachers	SI	SC	NC	Total
C	15	32 (52)	24 (42)	15 (15)	62 (109)
F	10	24 (37)	25 (46)	10 (10)	59 (93)
Comb.	25	56 (89)	49 (88)	25 (25)	121 (202)

Note: The first entry is the number of subjects described; the parenthetic entry, the number of behavior description sheets completed.

Classification of statements as positive, uncertain, or negative was made by the project personnel independent of their knowledge of the student's consensual identification. With only three exceptions all the 575 descriptive statements made of the SI nominated students were judged as negative. Similarly, all but one of the 204 descriptive statements made of the NC nominated students were judged positive. Of the 479 teacher statements for non-nominated SC students, 312 were judged positive, 30 were judged negative and 128 statements not clearly positive or negative. Apparently the non-nominated students were considered by their teachers as exhibiting generally favorable behaviors.

The five major behavior classification headings developed for the 1258 teacher behavior statements deal with the following:

1. Socialization behaviors such as sociability, getting along with others, relating well, etc.
2. Appearance, hygiene, and health.
3. Academically related behaviors such as truancy, underachieving, making little effort in class, seldom following class instructions, etc.
4. Deportment, such as discipline problems, fighting, lack of self-control, ignoring school rules, destruction of others' property, smoking, stealing, using drugs, sexual freedom.
5. More general personal qualities such as lack of confidence, defensiveness, lack of motivation, stubborness, distrustfulness, inconsiderateness, extreme self-consciousness, etc.

With the exception of very few unclassifiable statements which were therefore deleted, such as "transferred in at mid-year", all teacher descriptions were listed under one of these five categories.

The number of behavior descriptions received by each student, tallied according to each of the five description categories, were listed by teacher for each student. The average number of teacher behavior statements made per student for each of the five description headings is presented in Table 2.6.

As may be seen from the Table 2.6 entries, teachers in the two schools differed as to the number of descriptive statements they made of their students and distributed these somewhat differently over the five description headings. The major difference between schools appears in the teachers' use of the "deportment" type of statement for their SI students, with School F teachers writing less than one of these negative deportment-related behavior statements per two SI students and School C teachers writing two or three such statements per student. This same difference in fewer statements made by School F teachers is evident to a lesser degree for academic-related behaviors, the School F teachers writing fewer negative statements for their SI's and fewer positive statements for their NC's than did the School C teachers.

On the average, the School C teachers wrote seven behavior descriptions per student to the School F teachers' five. Excepting the differences just noted, the teachers' behavior descriptions from both schools were generally similar. Teachers from both schools made very few mentions of student appearance or health and averaged only one to two statements per student dealing with each of the categories of sociability, academic work, and general personal traits. Both schools' highest per student statements were for NC nominees within the Personal Traits category, an average of 4.4 statements per student description sheet.

Considering all behavior description categories together, the greatest number of statements tended to be written about NC students (an average between 8 and 9) with one or two fewer statements written about SI students and one less statement again (an average between 4 and 5) written about the SC students.

In developing the averages presented in Table 2.6, examinations were also made of the number of statements made about individual students. Contrary to expectations that within each nominational category (SI, SC, and NC) some students would have many more statements written about them, a general sameness among students was the rule; seldom did any one student receive even half again as many descriptive statements as did his average group member.

The possibility of weighting various descriptions of each student according either to frequency or severity of behavior, though earlier considered, was disgarded as a doubtful payoff task. Aside from noting (1) the frequencies of statements made within different behavior description categories for differently nominated subjects and the fact that NC students received only positively worded statements, SI students, with very minor exceptions, only negatively worded statements, and SC students a mixture of both, (2) and the fact that NC students received more behavior statements than either the SI students or the SC students, the more important contribution of the free-response teacher behavior descriptions is their content, the kinds of behavior they note.

Table 2.6

Average Number and Percentage of Teacher Behavior Descriptions Made Per Student for Each Description Category

	School	No. of Behav. Discript.	Behavior Description Category					
			Socia-bility	Appear.-Health	Academic	Deport-ment	Personal Traits	Total
SI	C	52	1.2 (16)	.5 (7)	1.9 (26)	2.4 (32)	1.5 (20)	7.4
	F	37	1.8 (35)	.3 (6)	.8 (16)	.4 (8)	1.8 (35)	5.1
	Comb.	89	1.4 (22)	.4 (6)	1.5 (23)	1.6 (25)	1.6 (25)	6.5
SC	C	42	1.3 (21)	.1 (2)	1.3 (21)	.6 (10)	2.8 (44)	6.3
	F	46	1.4 (30)	.1 (2)	.9 (19)	.2 (4)	2.1 (45)	4.7
	Comb.	88	1.4 (26)	.1 (2)	1.1 (20)	.4 (7)	2.5 (46)	5.4
NC	C	15	2.2 (26)	.2 (2)	1.7 (20)	.1 (1)	4.4 (51)	8.6
	F	10	2.4 (32)	.2 (3)	.5 (7)	0 (0)	4.4 (57)	7.5
	Comb.	25	2.3 (28)	.2 (2)	1.2 (15)	.1 (1)	4.4 (54)	8.2
Total	C	109	1.4 (20)	.3 (4)	1.7 (24)	1.4 (20)	2.4 (34)	7.1
	F	93	1.6 (31)	.2 (4)	.8 (15)	.3 (6)	2.3 (44)	5.2
	Comb.	202	1.5 (24)	.3 (5)	1.3 (21)	.9 (14)	2.3 (37)	6.2

Note: The first entry is the number of behavior descriptions made by teachers, parenthetical entries are precentages of descriptions per category.

The initial project sorting of the original 1258 teacher statements into 80 groups of nearly identical statements is offered in Appendix A to this report, along with an accompanying notation of frequency of each grouping's use by teachers in describing their SI, SC, and NC students. Further mention of these teacher behavior descriptions will be made in considering teacher checklist responses in the following subsection.

C. Social Incompetency Checklist

1. Procedures. After completing their behavior description sheets, 24 of the 25 participating teachers described a further sample of their students using a modified version of the Parker Social Incompetency Checklist (PSIC).

The original checklist consisting of 241 items focusing on behaviors relevant to social incompetence, was developed as part of Parker's doctoral study (Parker, 1970). The items were gathered both from extant field-tested instruments used with retarded and behaviorally disturbed youngsters, such as the AAMD Adaptive Behavior Checklist (Nihira, et al., 1969), the Walker Checklist (Walker, 1968), and from interviewing and trial testing with adolescent and adult populations.

The items covered a wide range of generally non-positive behaviors ranging from "bodily assault" to "staring into space", behaviors describable independent of particular settings and dealing with more general behaviors than more specific, such as, "wears inappropriate clothing" rather than "wears skirts too short". These items sampled both personal and social maladaptiveness and attempted to distinguish between deviancy and deficiency.[1] In keeping with this latter distinction, a large number of his checklist items were paired in terms of "intentionality", one item stating or implying the actor's purposiveness such as, "deliberately annoys others", and its mate stating or implying inability, lack of skill, or ignorance, such as, "annoys others without meaning to do so".

For project use, the PSIC was reduced to 227 items for School C teachers and further reduced to 212 items for School F teachers, the latter version eliminating such unused items as "commits murder". The 212-item PSIC is presented in Appendix B.

As was the behavior description packet, the PSIC was a teacher take-home instrument. The names of six of his students, two of whom he had earlier described as SI, two earlier described as SC, and two he had earlier identified as SI or SC but not described, were entered across the top of each of the pages of the checklist.

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[1] See Section I above.

The instructions were simply to check the behavior in the column under that student's name if it applied to that individual student.

Neither frequency nor degree of unacceptability was included in the project version of Parker's checklist.[1] Since all the PSIC items involved generally negative behaviors, students earlier described as NC were not included in the PSIC.

2. Teacher Agreement on the PSIC. The number of students described and the number of PSIC's completed by the participating teachers are reported in Table 2.7. As with Table 2.5, the row totals are not necessarily the sum of corresponding row entries since a few students were described (by different teachers) as both SI's and SC's.

In all, 148 PSIC's were completed for 84 of the consensually identified SI-SC students. Forty-five of these students were multiply listed, that is, described by two or more of their teachers. These multiple teacher descriptions provided for direct examination of the inter-teacher consistency in student description.[2] Checklist responses from teachers describing the same student were paired and frequencies of PSIC items similarly checked or unchecked for that particular student were tallied and converted into agreement percentages. These percentage figures are reported in Table 2.8. Two participating teachers are not included in this table since none of their six students were on any other teacher's PSIC.

The 57 percentages twice entered in the Table 2.8 teacher agreement matrix provide generally high inter-teacher consistency descriptions for the 14 School C and 10 School F teachers who described students in common with other teachers. The average percentages recorded in the column to the right of the matrix range from a low of 73 percent to a high of 92, with a median value of 84 percent. This 84 percent figure describes the average agreement between pairs of teachers completing the PSIC for the same student or students and includes agreements in both checking and nonchecking of PSIC items.

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[1] Though conceptually promising, operationally neither "frequency" nor "unacceptability" appeared to add to Parker's measures (Parker, 1970).

[2] The uniqueness of wording and selected vocabulary precluded similar interteacher-examinations for the behavior description sheets.

Table 2.7

Number of Students Described and Number of PSIC's Completed by School C and School F Teachers

School	No. of Teachers	SI	SC	Total
C	14	27 (41)	28 (47)	44* (88)
F	10	21 (27)	24 (31)	40* (58)
Comb.	24	48 (68)	52 (78)	84* (146)

Note: The first entry is the number of subjects described; the parenthetic entry, the number of descriptions made.

*Total does not agree with sum of SI and SC because some students were described as both and appear in both counts.

To achieve a high percent agreement two conditions must hold, that both teachers of the pair check approximately the same proportion of PSIC items and that a sizeable number of the same items are checked. In the extreme case, of course, a pair of teachers checking very few or nearly all of the PSIC items would earn a very high agreement percentage. Indeed, in part the higher percentages for the School F teachers may be suspected as partially due to their checking of fewer PSIC items (see Table 2.12 below) than did the School C teachers. However, within either school the lack of a discernable relationship between number of PSIC items checked and teachers agreement percentage empirically weakens this concern.

3. Effect on PSIC of Earlier Teacher Descriptions. In examining the teacher use of the PSIC, a preliminary check was made regarding the effect of the teacher's having or not having previously described a student. As may be remembered, every teacher list was to include both students who had been earlier described by that teacher in the free-response teacher description sheets and some who had not. A comparison of number of PSIC statements checked for previously described and non-previously described students involved simply tallying and averaging of those PSIC statements checked for these two student groupings. In preparing these tallies the SI-SC identification of the student was maintained in the sense that a teacher's PSIC checks for his non-previously described SC students were contrasted only with that teacher's PSIC checks for his other SC students, and similarly for SI students.[1]

[1] It should be noted that very few of the non-previously described students were SI's, which largely accounts for the smaller averages of 17.8 and 17.1 reported here. (See Table 2.9 for the total group SI and SC averages.)

Table 2.8

Teacher Percentage Agreement Matrix for the PSIC

School C

Teacher	1	2	3	4	5	6	7	8	9	10	11	12	13	14	$\bar{X}$
1		85		87	79		82		90			86	72	89	84
2	85					68		71				82		58	73
3				85	82	91	100	80		91		96			89
4	87		85			77		83	82	80	85		70		80
5	79		82			87	72	76					75	83	80
6		68	91	77	87		75			82	84			78	80
7	82		100	72		75				79	97				84
8		71	80	83	76				82				76		78
9	90			82				82			84		72	86	83
10			91	80		82	79						78		82
11				85		84	97		84			82		94	89
12	86	82	96							82			74		84
13	72			70	75			76	72	78					74
14	89	58			83	78			86		94	74			81

School F

Teacher	1	2	3	5	6	7	9	10	$\bar{X}$
1		89	95					90	90
2			83				70		80
3								82	87
5					89		93		91
6				89		89	97	86	90
7					89			94	92
9		70		93	97				87
10	90		82		86	94			88

Note: Entries are percentages of agreement with regard to PSIC items checked and unchecked for the same student by pairings of teachers identified by row and column numbers.

These tallies revealed that the average number of PSIC statements checked by teachers for those students previously described by them was 17.8 as compared to 17.1 for students not previously described by them. The .7 difference was clearly neither practically nor statistically significant. Apparently the procedural concern that prior explicit consideration by a teacher of a student would increase his later attributing checklist statements to him (possibly because of heightened recall or focus) was not operating for the sample of participating teachers.

4. Comparison of PSIC and Teacher Behavior Descriptions. To permit comparisons of the PSIC with the teacher behavior descriptions discussed in the previous subsection, the 212 PSIC items were sorted into the same five behavior description categories devised for teacher descriptions. The frequency and percentage of PSIC items sorted into these five categories together with similar distributions for the teacher descriptions are presented in the middle and left sections of Table 2.9.

Unlike the free response teacher descriptions, which distributed themselves somewhat evenly across all but the seldom mentioned Appearance-Health category, the PSIC items were found to be much more heavily focused on Deportment (student conduct): over half of the 212 PSIC items fell into this behavior category to the comparative neglect of items in the Sociability or Academic categories.

Though theoretically the category distributions of PSIC items constrain the actual number of checks teachers might make within categories, this constraint was not operational since no teacher checked nearly all the possible PSIC items within a category. The maximum number of total PSIC items checked for a student was 105.

The number of checks teachers made within each of the five categories of PSIC items are summarized as per pupil per teacher averages for describing SI and for describing SC students in the rightmost columns of Table 2.9. As may be noted from this table, teachers on the average selected a similar proportion of items from each of the five behavior categories. This was true both for their descriptions of SI and of SC students. In describing either student, about half of the PSIC items checked for that student were on the average from the Deportment category (which represented approximately half the total PSIC) with another third of the checked items coming from the Personal Traits category (which represented about one-third of the total PSIC).

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[1]All item breakouts and average response patterns for the longer 227-item PSIC used in School C were very nearly identical with those for the 212-item PSIC. To simplify reporting, tallies for the 227-item PSIC are reported conjointly with those for the 212-item PSIC.

Table 2.9

Frequency and Percentage of Teacher Descriptions and PSIC Items Within Each of the Five Behavior Categories

Behavior Category	Teacher Descriptions		PSIC Items		
	Average No./Student		No. of Items	Average No./Student	
	SI	SC		SI	SC
Sociability	1.4 (22)	1.4 (26)	7 (3)	1.3 (4)	.4 (3)
App.-Health	.4 (6)	.1 (2)	13 (6)	1.2 (4)	.5 (3)
Academic	1.5 (23)	1.1 (20)	19 (9)	4.9 (15)	2.0 (14)
Deportment	1.6 (25)	.4 (7)	111 (52)	15.9 (48)	6.8 (47)
Pers. Traits	1.6 (25)	2.5 (46)	62 (29)	9.6 (29)	4.8 (33)
Total	6.5	5.4	212	32.9	14.5

Note: The percentage for each frequency is given in parentheses following each frequency.

Comparing these and the remaining PSIC percentages with those for free-response teacher descriptions to the left of Table 2.9 reveals sharp differences in teacher responses on the two formats for student description. Other than to speculate on the more fatiquing and personally demanding free-response task which commonly yielded five to seven behavior statements by a teacher of his student as contrasted with two to five times as many statements checked, no explanation of these differences is apparent from the data. Quite clearly, the two different procedures for soliciting teacher descriptions of his students lead to different emphases with respect to "kind" of student behavior described.

An inquiry of special interest with respect to the teachers' use of the PSIC concerned possible differences in their checking of the different PSIC items for S's whom they had earlier described as SI or SC. The earlier reported teacher description data (see preceding subsection B.2) permitted only gross SI-SC-NC comparisons of teacher emphases and number of statements made regarding these student groups. The fact that all teachers were using a common item checklist pool supported a more careful statistical analysis of the PSIC data. For each of the five item behavior categories noted in Table 2.9, matched t tests were computed to examine the differences in average number of PSIC items checked by the same teacher describing students he had earlier identified as SI and SC. These computations are summarized in Table 2.10.

Table 2.10

Summary Data for Matched t Tests of Differences in Number of PSIC Items Checked by 24 Teachers Describing Their SI and SC Students

Behavior Category		Mean	Diff.		t
Sociability	SI	1.3	.9	.19	5.16**
	SC	.4			
App.-Health	SI	1.2	.7	.17	4.43**
	SC	.5			
Academic	SI	4.9	2.9	.75	3.85**
	SC	2.0			
Deportment	SI	15.9	9.1	1.73	5.24**
	SC	6.8			
Pers. Traits	SI	9.6	4.8	1.04	4.64**
	SC	4.8			
Total	SI	32.9	18.4	3.08	5.98**
	SC	14.5			

**Significant at the .01 level.

As is evident in Table 2.10, for all behavior categories significant differences (at the .01 level) were obtained favoring the SI student; i.e., teachers checked more PSIC items for their SI students than for their SC students. Though this result is not unexpected, since incompetence is generally definable as negative behavior and all the PSIC items were considered negative, it provides further assurance of the teacher as a dependable, internally consistent arbiter of social behavior. Had there not been reliable differences between the number of PSIC items checked for SI and SC students by the same teacher, either the relevance of the PSIC items or the judgment of the teacher, or both, would have been suspect.

5. Presumed Intentionality of PSIC Behaviors for SI and SC Students. As described in the preceding subsection C.1, a number of the PSIC items were written specifically to force arbiter response in terms of his perception of the intentionality or non-intentionality of the S's behavior. One anticipated difference in teacher use of the PSIC was that teachers would check more intentional than unintentional statements for their SI students than for their SC students. A further consideration here was the possibility of sex differences within both the SI and SC groups, in particular, the expectation that intentionality might be ascribed more to males than to females.

To examine these concerns, teacher responses were tallied by behavior category, by sex, and according to the intentional-unintentional emphasis of the PSIC items. Frequencies of teacher checking responses within these categories adjusted for number of items and number of either boys or girls per behavior category are reported in Table 2.11 as percentages of PSIC items checked.

Table 2.11

Percentages of Intentional and Unintentional PSIC Items Checked for SI's and SC's in Each of Five Behavior Categories

Behavior Category	No. of Items	SI Male N=44	SI Female N=24	SI Comb. N=68	SC Male N=39	SC Female N=39	SC Comb. N=78
Sociability							
Intentional	1	11	0	7	0	0	0
Unintentional	2	25	23	24	3	10	6
App.-Health							
Intentional	2	2	1	2	1	1	1
Unintentional	5	10	7	9	4	3	3
Academic							
Intentional	5	23	11	19	8	4	6
Unintentional	9	31	18	26	8	10	9
Deportment							
Intentional	33	20	12	18	10	4	7
Unintentional	23	13	10	12	5	4	4
Pers. Traits							
Intentional	4	31	12	25	16	10	13
Unintentional	10	25	15	22	5	8	6
Total							
Intentional	45	20	11	17	10	4	7
Unintentional	49	19	13	17	5	6	6

Note: N's are number of forms completed.

As may be read from the lower row in the SI section of Table 2.11, the same percentages of intentional and unintentional PSIC behavioral statements (17 percent each) were checked on the 68 PSIC forms completed for the 44 SI students. Similarly, only minor differences are apparent between the percentages of intentional and unintentional items checked for either the SI males or females, though males received nearly twice as many checked statements, approximately 9 or 10 items for SI males and 5 or 6 for the SI females. These percentages varied among item groupings, with the highest percentage of intentional items checked for the Personal Trait items for males (31 percent) followed by 23 percent for the Academic category items and 20 percent for the Deportment category items for the males.

The percentages in the right portion of Table 2.11 for the 78 PSIC forms completed for the 41 SC students, though generally only half those for the SI students, again were approximately the same for the intentional and unintentional PSIC statements, 7 and 6 percent, respectively. Though within the sex groupings, males tended to receive twice the percentage of intentional than of unintentional items in most of the behavior groupings, these differences were small numerically and were generally balanced by a slightly larger percentage of unintentional statements checked for the females.

In total, the Table 2.11 data suggests no particular emphasis on intentional as opposed to the unintentional behavior items for either the SI or SC groups. The expectation that the teachers would ascribe more purposiveness or deviancy (as contrasted with nondeliberateness or deficiency) to the negative behaviors of students whom they had nominated as socially incompetent than to their non-nominated students was not supported. Apparently the controlling considerations for nominating a student socially incompetent were independent of the deviancy-deficiency judgmental dimension postulated by Parker and supported for his arbiter groups of counselors, parents, and teenagers (Parker, 1970).

6. School and Teacher Differences in Use of the PSIC. As may be recalled, the earlier examination (subsection B.2) of teacher behavior descriptions revealed interschool differences with respect to emphasis or frequency of kinds of behavior statements made by teacher in the two schools. Teachers in both schools differed both in the total number of statements they wrote about their students (approximately seven statements per student by School C teachers and five for School F teachers) and in behavioral emphases (School C teachers wrote roughly three times as many Deportment types of statements as did School F teachers and nearly twice as many Academic types of statements). This subsection extends that interschool comparison to the PSIC. Table 2.12 presents the frequencies of School C and F teachers' checklist responses on the PSIC.

As is apparent from Table 2.12 data, the School C teachers in general checked about half again as many PSIC items in describing their SI students as did the School F teachers, these differences being most pronounced in the more popular response behavior categories of Deportment, Academic, and Personal Traits. In the total 212-item PSIC, the average School F teacher checked 38 items as compared to 24.4 for the School C teacher.

Table 2.12

Frequency and Percentage of School C and School F Teacher Checklist Responses on the PSIC for Each of the Five Behavior Categories

Behavior Category	No. of PSIC Items	Aver. No. PSIC Items/Student			
		SI		SC	
		School C	School F	School C	School F
Sociability	7 (3)	1.2 (3)	1.5 (6)	.6 (3)	.1 (2)
App.-Health	13 (6)	1.2 (3)	1.2 (5)	.7 (4)	.1 (2)
Academic	19 (9)	6.2 (6)	3.0 (12)	2.6 (13)	1.0 (16)
Deportment	11 (52)	19.1 (50)	11.0 (45)	10.0 (50)	2.6 (42)
Pers. Traits	62 (29)	10.9 (29)	7.8 (32)	6.3 (31)	2.5 (40)
Total	212	38.0	24.4	19.9	6.3

Note: The percentage for each frequency is given in parentheses following each frequency.

These interschool differences were especially accentuated for the SC students, who typically received somewhat less than half as many checked items as the SI students (see subsection C.4, above). As may be noted in the final row of Table 2.12, the average number of checks given their SC students by School C teachers was 19.9, just more than three times as many as the 6.3 average from the School F teachers.

The differences between schools, though clearly in evidence, are not as distinct as suggested by the average figures just quoted. Examination of individual teacher use of the PSIC revealed very extreme differences among teachers as to the number of items they checked, even within SI and SC groupings. These ranged from highs of 105 and 98 PSIC items checked (by School C teachers of SI students) to lows of 1 and 2 items checked (by School C teachers of SI students). The within-teacher variability was frequently quite large and seemingly idiosyncratic, apparently depending on the particular teacher-student combination; for example the School C teacher with the higher number of PSIC checks of 105 for an SI student also checked 76, 57, 52, 26, and 27 PSIC items for his other five students, only the last of whom was not an SI student.

But within-teacher differentiation is not a problem per se; indeed such differences are both to be expected and encouraged. What is more of a problem are instances of the same student receiving many PSIC item checks from some of his teachers and very few from others.

interteacher variability of 20 to 40 PSIC items was not uncommon, the grossest case again being the SI student receiving 105 checks from one teacher, 98 from a second, but only 10 PSIC item checks from a third, though all had nominated this student as socially incompetent.

The foregoing were individual teacher response frequencies. The teacher average number of PSIC items checked were, of course, less variable but still far from similar. The average number of checks given their students ranged from 63 to 6 items checked for 15 School C teachers for their SI students, from 55 to 2 for these same teachers for their SC students, from 54 to 7 for 10 School F teachers for their SI students and from 14 to 1 for these same (School F) teachers for their SC students. Only in the last grouping of 10 School F teachers was there reasonable homogeneity, a common tendency not to check many PSIC items.

Generally, a teacher checking relatively more PSIC items for his SI students was also a relatively high checker for his SC students, though even here there were considerable exceptions. The product moment correlations between the average number of PSIC items checked for the two student groups was a moderate .59.

In general, the conclusion with respect to teacher use of the PSIC would seem to be one of (1) marked interteacher differences, with extreme variations in number of PSIC checks made of the same student by different teachers, (2) a considerable intrateacher variation even within SI or SC student groups, teachers varying considerably in the number of PSIC items they checked for different students whom they had similarly identified as either SI or SC, and (3) consistent difference between schools, with School C teachers checking approximately twice as many PSIC items.

On the other hand, it should be noted that teachers in both schools when describing either their SI or SC students checked roughly the same proportion of the Deportment, Academic, Personal Traits, Appearance, and Sociability referent PSIC items with a consistently heavy loading of roughly 50 percent of the checked items dealing with Deportment and another third Personal Traits.

In neither school did teachers especially characterize either their SI or their SC students' negative behaviors as intentional rather than unintentional. Sex differences in ascribed intentionality were also lacking. However, independent of intentionality, sex differences were generally in evidence, teachers checking nearly half again as many items for the male as for the female students (7.6 items checked for males as contrasted with 5.3 for females), with females receiving twice as many checks on sociability items as males but males receiving twice as many checks on the more numerous Deportment items.

The total picture of teacher open-ended description and behavior check list response suggests marked teacher differences. Only in their global nominational task was there considerable agreement. Clearly, using a recall procedure of the type in this study, several responders are needed to describe student behavior.

And surely more variability may be expected to be introduced using describers or judges with different backgrounds and different settings. The home interview sample described in the next section of this report provides additional data relevant to this consideration.

Section III

DESCRIPTION AND ANALYSIS OF EXPERIMENTAL MEASURES OF SI, SC, AND NC STUDENTS

The preceding section described a teacher nomination procedure for identifying Socially Incompetent (SI), Socially Competent (SC), and Noticeably Socially Competent (NC) junior high school youngsters and subsequent free-response and checklist behavioral descriptions provided by the teachers of these same students, which together afford an operating teacher-definition of social incompetence.

Apart from teacher description, it is appropriate to examine student measures. The present section reports a further description of these three competency groups in terms of four sets of experimental measures, each possibly related to "social competence" from a different perspective: (1) a measure of the student's social inferential ability, (2) measures of his knowledge of persons important to him and his judgment of their social relations, (3) measures of his home and out-of-school social activities based on a detailed self-report schedule, and (4) social, family, and school reports based upon home interview with parents and with the student himself.

Because of the considerable testing time which would have been required for students to complete all of these tests, different subsamples SI, SC, and NC were asked to participate in different testing sessions. Negative replies to requests for parent permission and student absences further reduced sample sizes. The testing was initiated in the spring of 1970, a month following the teacher nominations, and additional students were tested during the following fall. The home interviews were all conducted following the Christmas vacation break in the winter of 1971.

Table 3.1 presents a summary description of the consensually defined SI, SC, and NC students in terms of school grade, sex, age at the time of teacher nomination, and IQ principally derived from the California Test of Mental Maturity administered one to three years previously. Subsample descriptions of particular students participating in each testing will be presented in the subsection of this report describing that testing.

A. Social Inferential Ability

1. Procedures. The ability to recognize and correctly interpret social cues has been generally considered by numerous writers in the area of social rehabilitation to be prerequisite to appropriate behaving in social situations. Since a specific handicap of many of the retarded is their failure to inobtrusively comply with the demands made by their settings, a special social perceptual training curriculum was developed to teach retardates these needed skills (Edmonson, Leach, Leland, 1969).

Table 3.1

Description of SI, SC, and NC, Samples:
Number of Males and Females and CA and IQ Means and Ranges

	N	Sex		CA		IQ[1]	
		M	F	Mean	Range	Mean	Range
SI	67	39	28	167.0	151-187	87.8	56-122
SC	59	29	30	165.5	151-185	102.5	58-126
NC	23	9	14	170.1	151-181	114.5	102-126
Total	149	77	72	166.9	151-187	98.5	56-126

[1] IQ available for only 125 students.

A major byproduct of that curriculum effort was the development of the Test of Social Inference (TSI) as a criterion measure to assess the effectiveness of that training curriculum (Edmonson, de Jung & Leland, 1965). The TSI is an objective picture interpretation test administrable to retarded adolescents which reliably identifies persons in terms of their ability to make appropriate interpretations of social cues.

From 1964 to 1969, the TSI underwent several revisions both with respect to content and to scoring instructions. The final test form, which has gained considerable use in diverse educational and vocational settings throughout the country[1], contains 35 pictures.

The TSI pictures are presented one at a time to the subject in an individual testing session. The test administration generally takes from 20 to 45 minutes. The pictures cover a wide range of social scenes, some familiar and uncomplicated, some less familiar and complex. Though the subject is encouraged to tell freely "what the picture is about", the examiner's interest is principally focused upon the subject's inferential responses, that is, statements about the picture which go beyond description or naming of the immediate detail. A listing of creditable inferential responses for each picture is presented in the Scoring Guide (Edmonson, Havens, & Carrell, 1967).

In preparing the TSI for administration to an essentially non-retarded population, nine of the 35 TSI pictures were eliminated as generally too easy.[2]

[1] An extensive compilation of these data is presented as a supplement to this final report.

[2] Eliminated items were 2, 3, 5, 10, 12, 19, 21, 22, and 26. (See Scoring Guide.)

Five examiners were trained for the spring testing and, due to project staff attrition, another three for the fall. Tests were given in standard, individual, untimed sessions averaging about 25 minutes and ranging from 14 to 40 minutes. The Scoring Guide was used as a criterion for creditable responses. Tests were scored by the two-plus scoring system developed by Smith (1968) which credits the student one point for each picture to which he responds with two or more creditable inferences and no credit for less than two creditable inferences.

The testing began in the spring of 1970, with 30 School C and 33 School F students tested. Twenty-eight of the School C students were retested after an intervening week to provide test-retest reliability data. An additional 24 students were tested the following fall, extending the test sample to include more students tested on other measures and particularly to include NC students.

Table 3.2 presents the sex breakout and the CA and IQ means and ranges for the total sample of 87 students receiving the TSI. These 87 students included 37 SI's, 37 SC's and 13 NC's. As may be noted by comparing these data with the total sample data in Table 3.1, no sex, CA, or IQ selection biases were apparently introduced in selecting the TSI sample.

Table 3.2
CA and IQ Means and Ranges
For Males and Females Tested on the TSI

	CA[1]			IQ[2]		
	N	Mean	Range	N	Mean	Range
Males	45	166.4	151-184	38	96.5	57-126
Females	42	166.0	152-185	35	99.6	63-126
Combined	87	166.1	151-185	73	98.0	57-126

[1] CA in fall 1970.

[2] IQ's not available for 14 students.

2. Analysis and Results. As has been reported (Edmonson, Leland, de Jung & Leach, 1967), retest reliability coefficients for administration of the 35-item TSI to retarded populations have been generally in the 80's and 90's. The test-retest scores for the 26-item TSI administered to the School C students similarly yielded a reasonably high product moment correlation of .83. As with most of the retarded samples which were tested earlier, scores improved slightly upon retesting.[1] The average first TSI score for the 28 School C students was 16.2; the retest average score was 18.1.

[1] In response to this problem, two alternative short forms of the TSI were developed in the course of the project. (See supplemen).

However, since for the present study only first TSI scores were to be used, this retest gain does not enter into analysis.

The major question of interest with respect to the TSI scores was whether junior high school students consensually-nominated as competent (NC's) would score higher on the social inference test than would students not as favorably identified, i.e., the SC's and SI's. Accordingly, the TSI data were examined in terms of individual comparisons between each pairing of the three groups, using the ANOVA within-subjects mean squares as the error term (Winer, 1962, p.100). A summary of this analysis is provided in Table 3.3.

Table 3.3

Summary Data for Individual Mean Comparisons of TSI Scores for SI, SC, and NC Students

	Sample Size	Mean	Individual Mean Comparisons	
SI	37	14.4	SI with SC	2.72
SC	37	16.0	SC with NC	4.97**
NC	13	19.0	SI with NC	11.69**
Total	87	15.8		

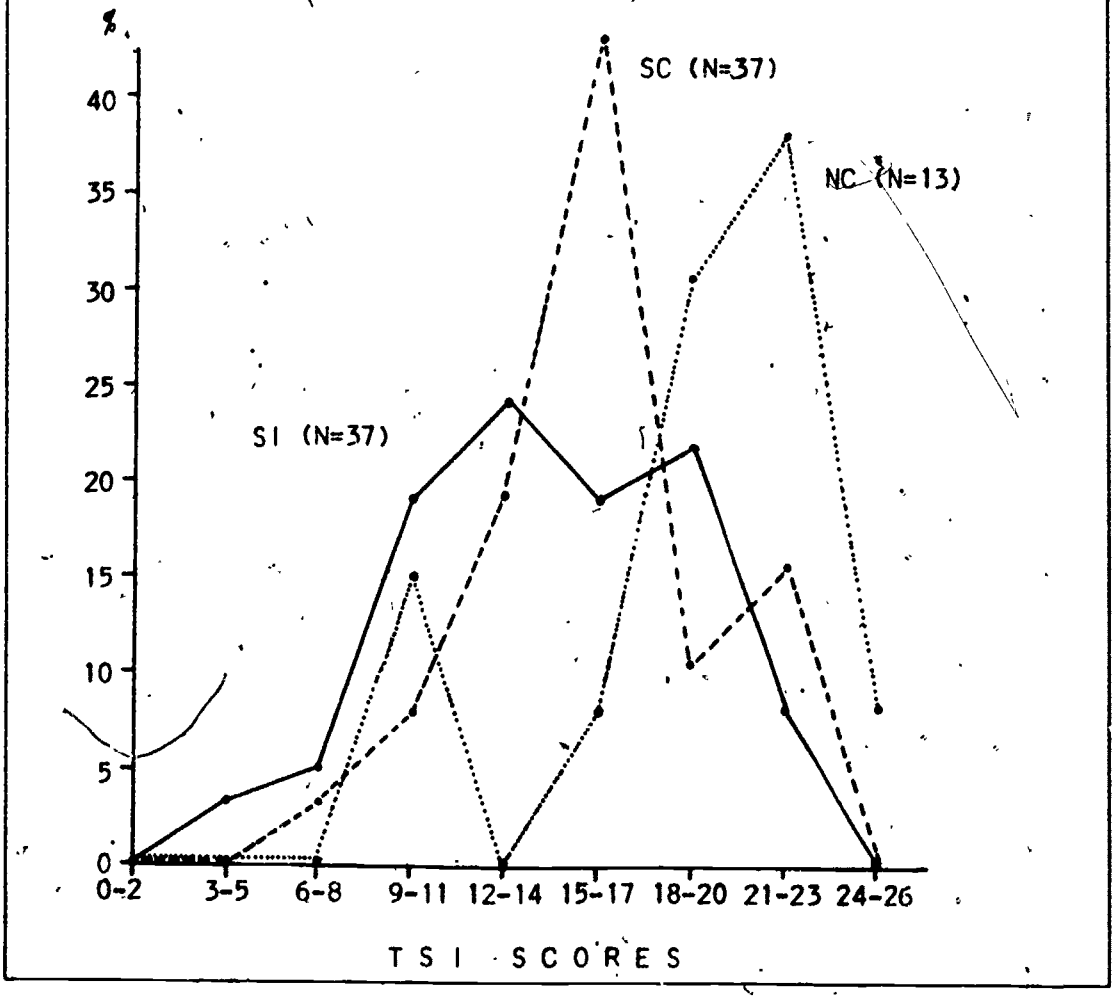
**Significant at the .01 level

The F ratio to test the hypothesis that all group means are equal was 5.89, significant at the .01 level, indicating non-chance differences between the mean TSI scores for the SI, SC, and NC groups. The F ratios for the comparisons of group means revealed the NC TSI mean to be significantly higher than either the SI or SC means but only chance level differences between the SI and SC TSI means.

The extent of differentiation between the SI, SC, and NC students in terms of their TSI scores is perhaps best revealed by the Figure 3.1 histograms which describe the relative frequencies of students from each group achieving different TSI scores. Consistent with the Table 3.3 interpretations, the NC group is most clearly separate. Excepting two students earning 9 and 11 points and another student earning 16 points, all NC students scored above the median score of 16 for the SC group and well above the SI group median of 14.2. Separation between the SC and SI students was much less pronouced, with nearly a third of the SC students scoring at or below the SI group median.

FIGURE 3.1

Frequency Distributions of TSI Scores for SI, SC, and NC Students



Instances of the reverse direction, that is, lower competency students achieving higher TSI scores than higher competency students, were equally infrequent. The NC group appeared distinct, less than one in ten SI students and less than one in six SC students scoring above the median NC group. Separation between the SC and SI students was much less pronounced, with approximately a third of the SI students at or above the SC group.

Interpretations of the foregoing SI, SC, NC distinctions with respect to TSI scores become less clear upon examination of recorded intelligence test scores available for 73 students in these three samples.

Earlier TSI data for educably mentally retarded adolescents revealed correlations with IQ in the .40's and .50's (see supplement, Table 6). The product moment correlation between the TSI score and IQ for the present sample of 73 students was .59. The IQ means for the TSI samples of SI, SC, and NC students were 89, 101, and 114, respectively. Reanalysis of the TSI data using an analysis of covariance design with IQ as the covariate yielded a non-significant of F of 1.63. The TSI group means adjusted for the linear effect of IQ were 15.3, 15.5, and 17.7 for the SI, SC, and NC groups respectively.

Apparently, differences between the TSI means for the SI, SC, and NC groups fail to maintain after statistical adjustment has been made for the effects of IQ. This is not to suggest, however, that SI's, SC's, and NC's do not tend to differ in their social inference as measured by the TSI (the Figure 3.1 data clearly describe these differences) but that it is possible to account for much of this difference in terms of concomitant IQ differences. Further discussion of TSI score differences among the three social competency level groups is included in the summary portion of this section which jointly considers the varied project data describing the samples of consensually identified SI, SC, and NC students.

B. Information and Social Ratings re Important Others

A second major testing interest focused on measures of the student's knowledge and appraisals of significant persons in his personal environment. The working assumption that an adolescent's adequate social functioning is in part dependent upon (1) information and understanding about the other persons in his social environment, and (2) examples or models of social interaction provided to the adolescent by those other persons, has been discussed by several writers. (Asch, 1952; Tagiuri, 1958)

Procedurally most relevant to the present project are two series of studies completed by the writer involving differing populations of formerly institutionalized retardates, regular 7th graders, and delinquent adolescents. The first series investigated the relationship between information measures regarding institutionalized cottagemates and subsequent community adjustments of higher level post-adolescent retardates (de Jung and Crosson, 1968). Extensive retesting of three cottage samples of educable retardates revealed stable differences between these patients both as to rate of acquisition and extent of knowledge regarding their peers.

Follow-up assessments of the social and vocational adjustment of these same retardates based on home interviews three to five years later revealed a generally positive relationship between the retardates' earlier other-person information scores and their subsequent independent functioning in the community. This finding maintained for both sex groups though certain scaling problems in measuring social and vocational adjustment and inherent sex distinctions in groupings based on residence and employment status disallows a clear conclusion as to the role of the interperson knowledge variable in affecting more optimum community adjustments.

The second series of studies involved delinquent and non-delinquent 7th graders and their descriptions of their "recalled persons" (de Jung, 1967). Recalled persons were lists provided by the students of all persons they had "ever personally known". These lists, begun in class sessions and completed at home, ranged from under a hundred names to five and six hundred names, with an average for the nearly 200 adolescents tested of around 300 names.

In one study based on this data (Trabont, 1968) delinquent and non-delinquent students identified persons on their lists who were especially important to them--persons they cared about--not necessarily liked them but were concerned about what happened to them. These important or "significant persons" matched with samples of non-important persons were then described in terms of their value systems and social relations. The data revealed significantly greater negative male biases and positive female biases on the part of delinquents as contrasted with regular 7th graders in their ratings of important recalled persons on the four social interaction scales used in the study (Concern for Others, Helpfulness, Reliableness, and Getting Along with Others).

The research conclusions recommend experimental use of recall population data in the clinical counseling setting to promote increased understanding of and treatment response to the interpersonal problems of the socially and vocationally maladaptive patient.

1. Preliminary Examinations of SI and SC Differences in Describing Self and Others and in Estimating Teacher Descriptions

Exploratory extensions of the procedures developed in the foregoing studies were trial tested in the spring of 1970. Two separate testing procedures were involved, one in each of the participating schools. The first procedure followed the recall population - significant other procedures mentioned above using ten SI and ten SC School F students. Eleven seven-point social behavior rating continuums were prepared for ratings of ten significant others. Examination of these data, though constrained by certain test administration problems[1] and dependent upon small samples, revealed consistently higher ratings made by SC students than by the SI students, particularly for the "reliable", "socially successful", and "perceived similarity" (to the student) scales.

The second procedure, using a checklist format, provided for the pupil's self-description and for his estimation of how others described him. The checklist contained 40 positive and negative behavior descriptions edited from those behaviors commonly attributed to the full project sample of junior high school pupils by their teachers. Pupils first estimated what several of their teachers would say about them and then described themselves with respect to these same statements. The planned sample consisted of 11 SI and 11 SC School C students, but due to absences, only 7 SI's and 10 SC's were actually tested.

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[1] The limited 50-minute class time for the complete testing, including the listing of recalled names, resulted in short recall lists of 16 to 78 names which quite possibly introduced distortions into the subsequent forced identification of 10 significant persons using the brief, principally classmate, listing.

The students were tested in a group during a regular 50-minute class period. Pupil estimates were scored as either congruent or incongruent with descriptions attributed to them by their teachers.

In general, the data suggest that the SI's were not only very aware that their teachers attribute certain negative characteristics to them but they also tended to rate themselves as having many of these characteristics. This agreement, however, was not so high as to close out an opposed finding to the effect that many SI's apparently felt they were somewhat different behaviorally than their teachers would say they were. The SC's were also aware of what characteristics their teachers would attribute to them and described themselves as indeed having these characeristics, but they did not feel that they had as many negative characteristics as did the SI's.

Though any examination of specific item responses risks an undue emphasis on the part of the examiner, some behavioral self-descriptions perhaps warrant mention as being either common to both SI's and SC's or unique to either. Specific negative characteristics attributed to themselves by most SI's were: not liking school or obeying school rules, engaging in frequent disruptive behavior, and being self-centered and angering easily.

However, contradictions seem apparent. None of the seven SI students indicated that he was not dependable, only two admitted to being impolite, and only two conceded that they participated in disapproved activities such as smoking, drinking, drugs, sex, etc. The SC students were more self-incriminating in this regard. Six of the ten SC students admitted to the "disapproved activity" question. However, they were similar to the SI's with respect to the "dependable" and "impolite" items, with only one SC student checking himself as not dependable or as impolite. Only two of the SC students agreed that they didn't like school or broke rules.

With respect to school work and friends, only one SI as contrasted to five SC's said that he was not working up to his ability, though over half said they put out little effort, have inefficient work habits, and have trouble following instructions. Four SI's but not one SC considered themselves less than average in academic ability. Another major separation between the SI and SC students appeared to be with respect to friendships, no SC saying he had no friends and only one even saying that he had few friends, as contrasted with nearly half the SI's saying they had no friends and two more saying they had few friends.

On the more general level, analyses[1] of these data showed that: (1) SI pupils more frequently described themselves as having negative

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[1]Using the Kolmogorov-Smirnov two-sample test.

and not having positive behaviors than did SC pupils; (2) SI's and SC's were both better than 60 percent correct in estimating how their teachers described them; (3) both the SI's and the SC's predicted that their teachers would describe them much as they described themselves, an average agreement of 74 percent for the SI's and 87 percent for the SC's; and (4) the SC's had higher agreement than SI's between their self-description rating and how they felt their teachers would describe them.

In summary, it needs to be recalled that these conclusions are based on quite small samples and must be regarded more as suggestive than conclusive. Further reference to student self-descriptions will be made in reporting the interview data later in this section.

2. Information and Social Ratings. Consideration of the earlier recalled persons and other-person information studies suggested that measures of the student's awareness and appraisal of persons who participate importantly in his phenomenological world might afford a further interpretation of his social competence. The working assumption was that the extent of information students had regarding individuals important to them and their judgment of these persons' social behaviors would be related to their own social competence.

To test this assumption, the procedures and format for the spring administration of the recalled persons testing were considerably revised and expanded to provide for an information-about-others estimate by the student and a set of student ratings of his important others. The fall 1970 testing plan called for testing all available consensually identified School C students. Lack of parent permission and failure to return recall lists reduced this sample to 32 students.

The sex breakouts, CA, and IQ means and ranges for these 32 students are presented in Table 3.4. As may be noted by comparing these data with the total sample data in Table 3.1, no apparent sex, CA, or IQ biases were introduced in selecting this sample.

Table 3.4

CA and IQ Means and Ranges for Males and Females Tested on the Information and Social Relations Scales

	CA			IQ		
	N	Mean	Range	N	Mean	Range
Males	16	168.2	151-184	15	96.4	57-120
Females	16	165.8	153-175	15	105.1	63-117
Comb.	32	167.0	151-175	30	100.8	57-120

The focus of the fall testing procedure was on the student's knowledge of persons important to him and his assessment of the social relations of these same persons. For each student a comparison sample of "non-important" recalled persons matched to his important persons in terms of sex, age, and frequency of social interaction with the student was also used. The testing involved a short 20-minute class period, a two-day take-home interval, and a further 50 minutes of class time.

In the first testing session each student was given a stapled set of lined pages and asked to prepare a recall persons list, writing the names of "all persons you have ever known, persons you have met, talked to and remember knowing". He was also to identify his recalled persons with respect to their approximate age (child, same age, older teenager, adult), sex, relationship (relative, friend, or other), and frequency of speaking contact (daily, weekly, monthly, a few times a year or less).

After 15 minutes of writing in class, students were instructed to take their lists home and complete them within two days, to have parents or siblings help if they wished but to do their own writing and be sure all names would be persons they themselves knew. Their final task, after having written all their recalled person names, was to underline 12 to 25 persons on their list who were "especially important" to them.[1]

The second in-class testing period was about a week later, allowing the project staff time to prepare reduced listings for each student of 12 of his significant recall persons and 12 matched non-significant persons. This 24-name list was presented to the student on a rating sheet containing seven columns in each of which alternative grades (A, B,C,D,F) were listed for the student to choose from in rating his 24 persons. In each column for each of the 24 listed persons, C was to be circled for average, B for above average, D for below average, A for especially high, and F for very, very low.

In the first column the student was to choose either an A, B, C, D, or F to indicate how well he knew each listed person's <u>life history</u>, such things as how old that person is, where he was born, his family, his schooling, places of residence, and jobs which he may have had. In the second column the student was to indicate how well he knew each persons's <u>likes and dislikes</u>, what pleases him and what doesn't, what things he likes and doesn't like. In the third column the student was to indicate how well he knew what the listed person <u>really believes</u> and thinks.

The last four columns dealt with the student's judgment of his listed persons' ways of behaving with others. The column headings were <u>fairness</u>, <u>dependable</u>, <u>domineering</u>, and <u>socially successful</u>.

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[1] The in-class and take-home instructions for completing the recall listing together with a sample recall list page and rating page are presented in Appendix C.

The fairness column was further defined as "dealing honestly with others; not taking advantage"; the dependable column as "being reliable, doing what was promised or expected"; the domineering column as "commanding others ; insisting that others do what he or she says"; and the socially successful column as "being liked and respected and admired by others". With the exception of the low IQ students, who apparently needed (and received) more careful supervision,[1] the students seemed to be able to follow these directions completing their seven sets of rating within the planned class period.

In tabulating the students information estimation and social relations rating responses, A's were equated to 4's, B's to 3's, C's to 2's, D's to 1's, and F's to 0's. To simplify presentation and discussion of the data the 4, 3, 2, 1, 0 ratings for the negatively valued domineering scale were reversed to 0, 1, 2, 3, and 4.

3. Results. The information and social ratings sample included ten consensual SI's, 13 SC's, and 9 NC's. The average number of recall names listed for these three competency level groups were 72, 319, and 405 names respectively. The smaller listings provided by the SI's were principally names written during class time since few SI's apparently were willing to spend much home time on this task. These smaller lists were considered sufficiently large, however, to provide the required 24 names for the rating tasks. The average number of important others identified by three competency level groups were practically identical, 16 names for the SI's and SC's and 17 for the NC's.

As with the TSI scores, the major analysis made of the information and social ratings data was in terms of comparisons between SI, SC, and NC groups. The general guiding hypothesis was that higher competency level students would have more knowledge regarding their significant persons and would judge them more favorably with respect to their social interaction behaviors than would lower competency groups.

The data were analyzed using the ANOVA mean square within subjects as the error term for the individual mean comparisons to test hypotheses of mean differences (Winer, 1962, p. 100). Summaries of these analyses for the three information measures and for the four social relations ratings of significant others are presented in Table 3.5 and 3.6 respectively.

As may be noted from the mean column entries in Tables 3.5 and 3.6, the SI student means were consistently smaller than those for either the SC's and the NC's on all seven measures, confirming the expected negative relationship between social incompetence and both information about important others and social relations ratings.

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[1]These students also had individualized help in completing their recall lists.

Table 3.5

Summary Data for Individual Comparisons of Information Scores Based on SI, SC, and NC Students' Stated Knowledge of Their Important Others

	Sample Size	Mean Information Scores: Life History	Likes and Dislikes	Real Beliefs
SI	10	2.58	2.55	2.16
SC	13	3.08	3.07	2.91
NC	9	2.62	2.88	2.70
Indiv. Comp. ($F_{1,31}$)				
SI with SC		3.68*	5.22**	6.89**
SC with NC		2.90*	<1	<1
SI with NC		<1	1.75	3.00*

*Significant at the .05 level; **significant at the .01 level.

Table 3.6

Summary Data for Individual Comparisons of Social Relations Scales Based on SI, SC, and NC Students' Ratings of Their Important Others

	Sample Size	Mean Social Relations Scales*: Fairness	Depend-able	Domi-neering[1]	Soc. Success
SI	10	2.45	2.55	1.90	2.59
SC	13	3.24	3.28	2.62	3.28
NC	9	2.94	2.98	2.42	2.92
Indiv. Comp. ($F_{1,31}$)					
SI with SC		10.64**	7.10**	3.94*	7.08*
SC with NC		1.39	1.16	1.92	1.77
SI with NC		3.49*	2.01	<1	1.38

*Significant at the .05 level; **significant at the .01 level.

[1]Reported values for this scale are reversed, with 1.0=maximum rating for domineering behavior and 4.0=extremely low.

Equally consistent, though not anticipated, were the higher means for the SC students than for the higher competency NC students. Though this difference achieved significance for only one of the seven comparisons (life history information), the repeatability of this finding across scales clearly implies a less pronounced relationship between teacher-identified social competency and information and social relations ratings for the more visibly competent students.

Inspection of the individual student scores revealed a generally low variability within the NC group, refuting the possibility of one or two students in the NC group especially lowering their group means. Though three SC girls were noted to be generally very high in their knowledge estimates and ratings, even without these highest raters the SC means would remain higher than the NC means. Considering the SI-SC group separations, very little score overlap was found; typically only one SI student in ten scored higher than the SC group mean on any of the seven scales.

The foregoing SI-SC-NC mean comparisons for important others are presented visually as unshaded portions of the bar graphs in Figures 3.2 and 3.3 for the information measures and social relations ratings respectively. The heights of the shaded portions of the graphs represent the means for the not especially important persons.

As may immediately be noticed for all three social competency level groups and for all scores and ratings excepting only the dominance scale for SC students, the knowledge estimates and social ratings made of the students' non-important recalled persons were always lower than those made of their important recalled persons. However, this generally large within-scale difference notwithstanding, as with the means for data based on the students' important others, the matched-other means for the SC students were always highest. SI, SC, and NC separations were also found to be less distinct for the non-important person data, though three of the seven SI-SC mean comparisons did achieve significance.

Except perhaps in providing the students a lower reference point in making their ratings, the use of a non-significant matched-persons sample appears to add little to the interpretations based on student's descriptions of only persons especially important to him. The salient finding here that low competency level students describe themselves as least knowledgeable about their important persons and also see them as less high (favorable) on all four social relations scales suggests, for the SI student, both poor information processing skills and poorer models[1] for social relations. The extent to which these factors prescribe poorer interperson behaviors for the SI student or are the products of his imcompetent social behaving, or again, are products of outside factors such as family environmental restrictions are questions not answerable from the present data.

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[1] Phenomenologically poorer at any rate; no data was available as to the veridicality of the SI students' ratings.

Figure 3.2

Average Information Scores of SI's, SC's and NC's for Their Important Others and Matched Others

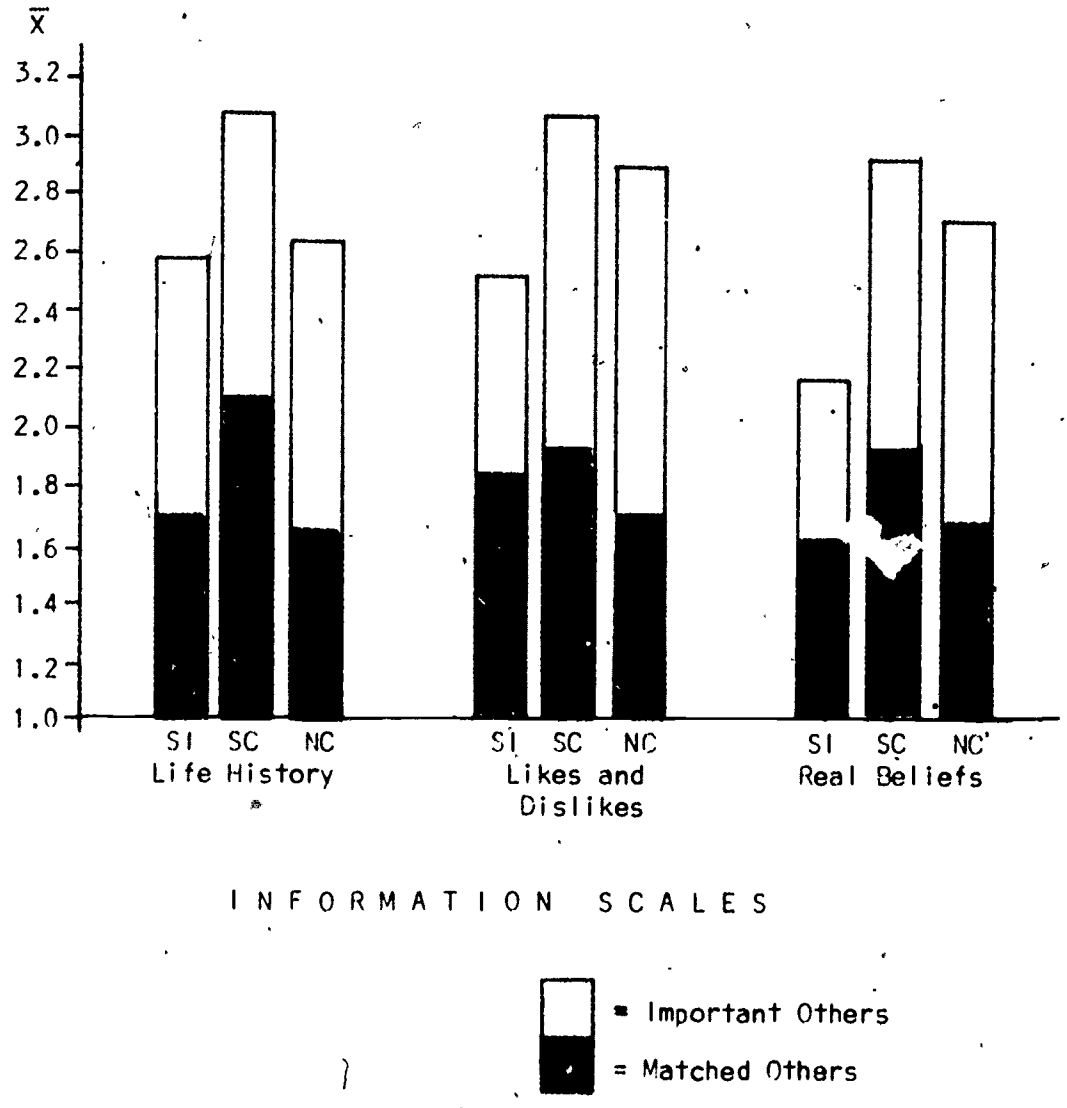
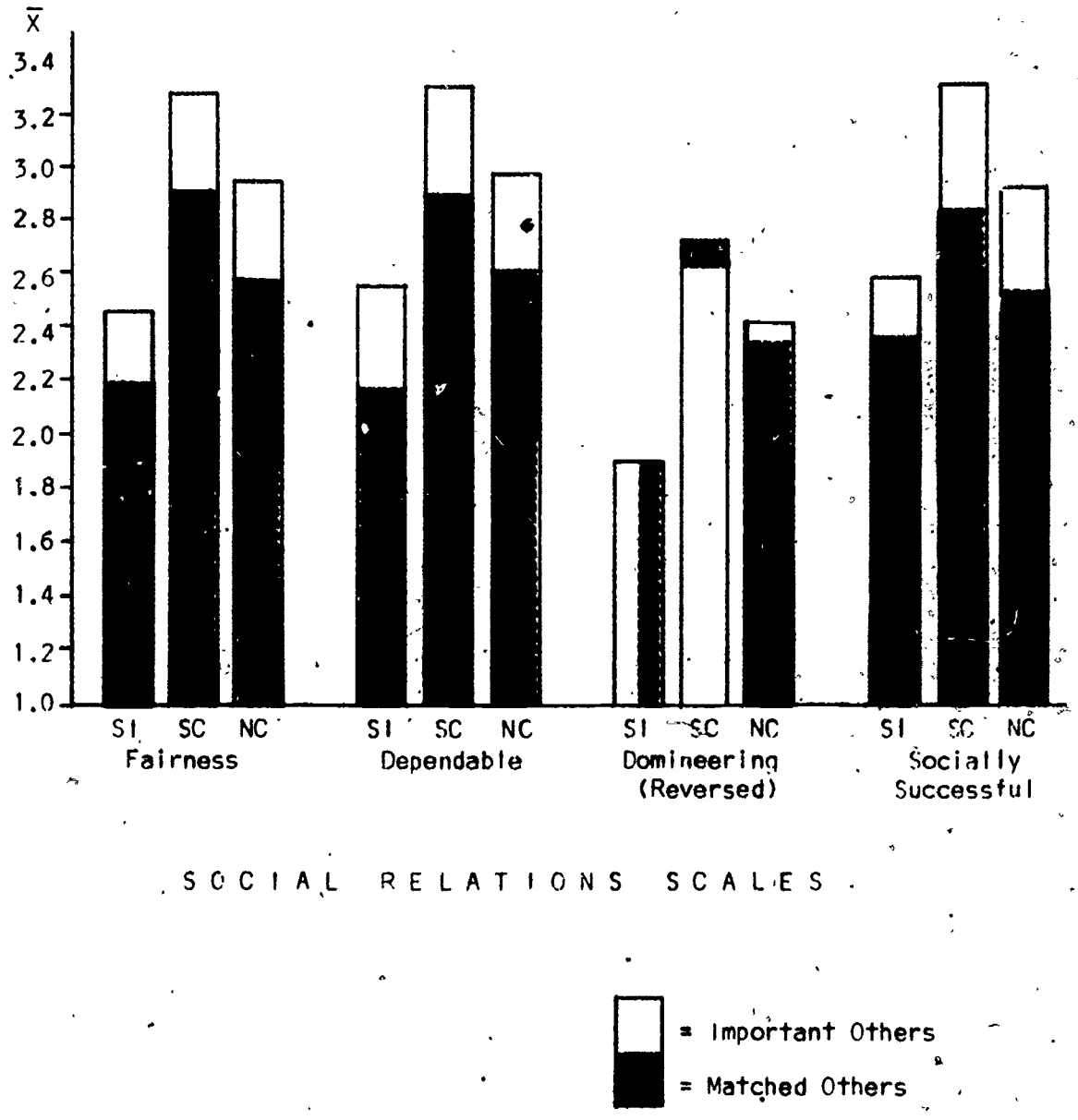


Figure 3.3

Average Social Relations Ratings Made by SI's, SC's and NC's of Their Important Others and Matched Others



C. Social Activity Questionnaire

A third major testing interest centered on the student's outside-school activities as these might be related to his teacher-defined level of social competence. This focus follows the broad rationale and methodology for studying relationships between behavior and social settings advanced by Barker and Gump (1964; Barker, 1968) who had found pupils to be differentiable both with respect to the variety of activities in which they participated and with respect to the "level of responsibility" with which they performed.

More recently, Edmonson (1970) explored the possibilities of a Social Activity Questionnaire and Social Activity Diary for use with retarded adults to measure ranges of their social activities and the levels of responsibility of their performance in social settings. After several pilot trials with junior high school pupils and adults, the questionnaire format was selected in preference to the diary as being adequately reliable and the more efficient instrument in terms of tester time. The final sample in Edmonson's study included 25 young adult retardates living in private residential settings.

Positive correlations were obtained between their vocational counselor's ratings of social competency and the frequency of outside-home performances (r=.65) and the Ss' level of responsibility scores (r=.40), and a negative correlation (r=-.57) with frequency of at-home performance. These relationships suggest a possible remedial focus for social incompetent adult retardates which possibly may extend to incompetently functioning junior high school age persons.

1. Instrument and Procedures. Edmonson's earlier Social Activity Questionnaire was considerably modified for the present study into a 14-page questionnaire booklet to be filled out by each student in group sessions within the regular 50-minute class period. Students with reading and/or writing problems would, of course, require individual support in completing their questionnaire. This modified Social Activity Questionnaire (SAQ) consisted of a series of questions concerning the student's activity at home and outside of his home. Most questions were accompanied by a multiple choice listing of answers requiring merely checking or circling. Other questions required brief written responses such as names of friend or place. The SAQ was administered within the regular 50 minute class period. A listing of the SAQ questions are presented in Appendix D.

Except for a preliminary testing of 17 SI and SC School F students in June, 1970, the bulk of the SAQ tests were administered the following fall.

The test sample called for all available NC's and SI's and those SC's scheduled for fall testing on the TSI. Including the spring sample, the total SAQ test sample numbered 67 student, including 35 School C students (19 boys and 16 girls) and 32 School F students (17 boys and 15 girls). To provide data relevant to the stability of the SAQ with a junior high school population, 34 of the School C students were administered a second SAQ two days following their first testing. A summary description of the SAQ test sample in terms of sex, chronological age, and IQ is presented in Table 3.7. As may be noted by comparing these data with the total sample data in Table 3.1, no sex, CA, or IQ selection biases were apparently introduced in selecting the SAQ sample.

Table 3.7

CA and IQ Means and Ranges for Males and Females Completing the Social Activities Questionnaire

	CA			IQ		
	N	Mean	Range	N	Mean	Range
Males	36	166.3	151-184	30	97.4	57-126
Females	31	164.6	152-184	26	100	62-126
Comb.	67	165.5	151-184	56	98.6	57-126

2. Results. In summarizing the SAQ data, information from the questionnaires was converted into three principal scores for each subject, a home activities score (HA), an outside activities score (OA) and a level of responsibility score (LR). These scores are defined as follows:

HA - Home Activities: The number of different chores and the number of different home recreation activities reported were added together to make up the HA score. Because S's were asked to report both what they did weekly and what they did less often, two different HA scores were obtained for each S and their differentiating power examined. Except for the reliability data, only the total HA score was used in the data analyses.

OA - Outside Activities: The number of different outside home recreation activities reported, the number of different types of service agencies, stores and commercial eating places visited, the number of different clubs or meetings attended (and jobs, if reported) were added together to make up the OA score.

LR - Level of Responsibility: LR was based upon the level of activity reported in connection with each outside activity. LR does not take into account responsibility of performance within the home. Each outside activity was assigned a separate LR score, from 1 to 6 (no S attained a score higher than 4) following the SAQ Scoring Guide (Edmonson, 1970). The average LR was computed separately for each of the above categories of outside activities, then the overall LR was computed as 10 times the weighted average of the categorical LR subscores.

Though 34 students received a second administration of the SAQ, school commitments curtailed their testing time and few students finished the entire retest questionnaire. Thirty-one of the pupils retested completed the section on Home Chores and most completed Home Recreation (which together comprise HA), but few Ss completed the categories (Service Agencies, Commercial Meals, Meetings, Stores, Outside Recreation, Visits and Noncommercial Meals) that together comprise OA. Because the LR score is based upon the performance levels of these several categories of outside activities, the lack of completion of OA categories required prorating to compute a total LR score from the retest questionnaire. To provide maximum information regarding the retest stability of the SAQ, product moment test-retest coefficients were computed for additional SAQ subscores derived from the more complete parts of the questionnaire. These are presented together with their test and refest means and sigmas in Table 3.8.

Table 3.8

Test-Retest Means, Sigmas, and Correlations for SAQ Subscores

Subscore	N	Mean		Sigma		r
		Test	Retest	Test	Retest	
Weekly Home Chores	32	9.2	9.0	6.5	6.4	.92
Total Home Chores	31	15.7	15.7	5.1	5.0	.93
Total Home Activities	15	16.5	14.6	6.5	6.3	.92
Service Agencies	15	16.4	16.9	4.9	6.4	.90
Level of Responsibility	28	20.5	22.3	9.0	8.3	.88

As may be noted from Table 3.8, the SAQ subscores all were extremely stable over the two day test-retest interval, correlations ranging from .88 to .92 and generally identical means for the two administrations. It might be added that because of unfinished retest SAQ's, the LR score was computed from incomplete responses and might be expected to be even more stable given the full administration.

As with the preceding experimental test scores, the SAQ scores were principally examined for differences between the SI, SC, and NC groups. The guiding hypothesis was that higher competency level students would report a greater number of home activities, a greater number of outside activities, and maintain more personal responsibility for these outside of home activities. Accordingly, the SAQ data were analyzed using the ANOVA within-subjects mean square as the error term to test for mean differences between individual groups. Summaries of these analyses for the HA, OA, and LA scores are presented in Table 3.9.

Table 3.9

Summary Data for Individual Comparisons of SAQ Scores for SI, SC, and NC Students

	Sample Size	Home Acts.	Outside Acts.	Level of Respons.
SI	24	14.9	27.6	23.0
SC	27	19.6	29.0	24.1
NC	13	20.2	30.3	24.3
Indiv. Comp. ($F_{1,63}$)				
SI with SC		8.26**	<1	4.84*
SC with NC		1	<1	1.11
SI with NC		6.96**	<1	4.57*

* Significant at the .05 level. ** Significant at the .01 level.

The means reported in the upper portion of Table 3.9 for the HA, OA, and LR scores in all instances were highest for the NC students, next highest for the SC students, and lowest for the SI students. The F ratio for the comparisons of pairs of these means involving the SI students were significant at the .01 and .05 levels of confidence for the HA and LR scores, respectively, but were below chance level for the OA scores.

The significant F's confirm the anticipated relationship between the students' teacher-assigned social competence level and the number of home activities he reports and the responsibility or self-direction he assumes in his non-home activities. This confirmation, it should be noted, is only for the SI student group; differences between the SC and NC groups, though in the hypothesized direction, were too small to achieve significance.

On the other hand, ad hoc considerations of the non-SI-SC-NC-discriminating outside activities scores suggest perhaps a more meaningful subbreakout of this score in terms of the leadership and follower or participant and spectator roles of these activities. The present total OA score, including frequency counts of attendance at movies, recreational facilities, and shopping areas, etc., together with club meetings and possibly more self-directing and creative events takes no account of student roles within these activities.

In part, the effect of such a leader-follower breakout is reflected in the significant between-groups differences for the responsibility measure. Inspection of individual LR scores, however, indicates far from clear competency level group separations, with a third to a half of the lower competency level students scoring above the mean of their next highest competency level group and only slightly less overlap in the opposite direction. A very similar non SI-SC-NC separation of individual students was evident for the HA scores.

Intercorrelations between these three SAQ scores were generally low, rs of .33 between the HA scores with either the OA or LR scores and an r of .14 between the OA and LR scores. The relationship of SAQ scores and IQ was also examined. The correlations were again generally low to moderate, r's of .35, .10, and .46 between IQ and HA, OA, and LR respectively.

Examinations of individual SAQ and IQ scores suggested some sex differences, with a stronger IQ relationship for the HA scores for boys than for girls but the reverse for the OA scores — i.e., stronger IQ relationship with the OA scores for girls. As might be expected from the prevalent cultural sex typing of home chores and the greater restrictions placed on girls' outside activities, girls typically had higher HA scores than did boys (means of 21 for the girls as contrasted with 15 for boys). It should be noted, however, within the female group considerable variability in the number of reported home activities was noted, this variability clearly unrelated to IQ. On the other hand, sex differences in the mean OA scores were negligible, means of 29 for boys and girls.

School differences appeared for the HA score which were in turn negligible for the OA scores; it will be recalled that School C was more urban, located on the periphery of a larger metropolitan area and drawing pupils largely from "blue collar", families whereas School I was more rural with many farm families.

HA mean scores for Schools C and F were 18 and 17, respectively; their OA mean scores, 32 and 25, respectively. Apparently the particular outside home activities listed on the SAQ favored the more urban students.[1] Similarly the LR score based on reported responsibilities in non-home activities favored the more urban School C, with a mean LR score of 80 as compared to a mean LR score of 71 for the more rural School F.

Further related factors here are home conditions such as family income. The latter data was obtained for 48[2] families of students tested on the SAQ as part of a larger data collection effort to provide more detailed socio-economic data regarding the total SI-SC-NC sample. Sorting the home background questionnaire responders according to state annual income (high, $8,000 and above; middle, $6,000 to $7,000; and low, $5,000 and below), means for the three SAQ measures were computed for the three income groupings.

As anticipated, the mean HA and OA scores were lowest for the lower family income students, though differences between the middle and upper income groups were equivocal, highest for the upper income group on HA and highest for the middle income group on OA. The LR mean did not quite follow the expected pattern; the middle income group was lowest, the lowest income group next, and the high income group highest.

The interpretability of the SAQ - social competence relationship is complicated by the fact that a much larger proportion of SI students comes from low income homes (see Table 3.15) and the concomitant effect of fewer home and outside-home activities.

Descriptively, the data are clear that teacher-identified socially incompetent students report fewer home activities and less responsibility and initiative in their away-from-home situations than do teacher-identified socially competent students. The following subsection on home interview data includes some of these same students, and adds to their descriptions.

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[1] And, of course, the more urban-dwelling students are involved in more outside the home activities.

[2] A home background questionnaire was completed by only 48 of the families of the 67 participating (SI, SC, or NC) students due to a fairly high incidence of refusals by parents who considered their school history, occupational history, and income level to be a private matter.

D. Parent and Student Interview Data

1. Instrument and Procedures. A final description of the teacher-identified socially competent and incompetent junior high students was provided from interviews of a sample of their parents and of the students themselves. All of the previously reported data was either based on teacher reports or on student testing. The possibly biased and certainly restricted observational opportunities of the former and the narrow, specified focusing of the latter quite possibly neglected important descriptions of the students. These considerations recommended an additional student description source.

The structured interview affords an especially flexible probe adaptable to interviewee idiosyncracies yet is directed toward specified common information. In developing the questionnaire, conversationally structured lead sentences were planned for each of the selected areas of inquiry with a set of more specific questions to be asked if the initial questions were not understood, the interviewee was not talkative, or if the desired information was not obtained in the general conversation.

The final interview form consisted of five sections (1) an introductory time chart designed to trace the student's activities on a typical school day and on a typical Saturday; (2) a series of questions focusing on the student's relationships with other people, his personal habits and interests, and his school activities; (3) two checklists, one dealing with the informant's satisfaction with the student's progress in social and academic areas and the second with the student's household chores; (4) a final question as to what the school might do to help adolescents with their problems; and (5) a rating sheet to be filled out by the interviewer immediately after leaving the interview, his ratings to be based on his total information provided by the informant.

Because of time and cost limitations, the interview sample was restricted to consensually nominated SI and NC students only. The starting list included all available NC's and an equal number of SI's. Selection among the SI's was made in terms of those students having the most complete test data. Eleven families from the starting list of 45 names were not able to be interviewed; 4 familes had moved, 5 refused interviews, and one student had been expelled and lacked an address, and one enrolled student simply could not be found. In all, interviews were conducted in 34 homes, 15 were those of School C students and 19 those of School F. Generally only one parent was interviewed, though occasionally both parents were at home and contributed information about their son or daughter. All students from these families were also interviewed either at home or at school within a few days of their parents' interview.

The interviews were conducted during the winter of 1971 by three staff members with considerable experience in testing and interview work. Conduct of the interview was casual and friendly. Most of the parents were agreeable, cooperative, and eager to talk about their children. The interviewer adapted the language of the questions to suit the occasion, used probe questions to clarify the lead question, to keep the conversation going, or to elicit information which otherwise might not have been touched upon. Generally, the interviewer tried to be an encouraging and sympathetic listener, making a few notes on the schedule form but being careful not to lose personal contact with the interviewee by doing too much writing.

After the interview was completed the interviewer left the premises but then stopped at some convenient place and immediately summarized the interview data in terms of a series of ratings, using a five-point scale[1], based on the informant's statements as to how well the student was getting along with peers, with adults, with parents, with siblings, his general behavior with others, his personal grooming, how well he was getting along in school, and his independence from home. Also at this time, the interviewer tape recorded a narrative report of the interview including a description of the home and environment and the interviewer's comments on the response of the interviewee(s) and any extra information and anecdotes which seemed pertinent but were not necessarily covered by the interview schedule.

The interviews generally lasted one and a half to two hours. As a token of appreciation for their time, each family was given a magazine subscription of its choice, either for their child or for the family as a whole.

The 34 interviewed students were evenly divided between the SI and NC groupings, 17 students in each. Table 3.10 presents the sex breakout and the CA and IQ means and score ranges for these students. As may be noted by comparing these data with that for the total sample data in Table 3.1, no sex, CA, or IQ selection biases were apparently introduced in selecting the interview sample.

2. Results. Aside from adding various incidental items of background information such as indications of socio-economic status (discussed in a following summary subsection), the taped narratives provided a general confirmation of the interviewer's ratings. These ratings were principally examined for differences between the SI and NC groups. The general guiding hypothesis was that informants describing NC students would report more favorable behaviors and express more satisfaction with their behaviors than would informants describing SI students.

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[1] These scales comprise the last page of the interview schedule, Appendix E.

Table 3.10

CA and IQ Means and Ranges for Males and Females in the Interview Sample

	CA[1]			IQ		
	N	Mean	Range	N	Mean	Range
Males	14	170.0	153-181	12	93.0	74-120
Females	20	164.5	152-184	19	105.3	75-126
Total	34	166.7	152-184	31	100.5	74-126

[1]Fall, 1970.

Since only two groups were involved, the hypothesis was examined in terms of t ratios. Summary data for these t tests are presented in Table 3.11.

Table 3.11

Summary Data for Comparisons of Interview Ratings for 17 NC's and 17 SI's

Interview Section	Parents				Students			
	Means		Diff.	t	Means		Diff.	t
	NC	SI			NC	SI		
Peers	3.7	1.8	1.9	6.94**	3.6	1.9	1.7	6.31**
Adults	3.3	2.2	1.1	3.06**	2.9	1.6	1.3	4.46**
Parents	2.9	1.8	1.1	2.86**	2.6	1.5	1.1	3.06**
Siblings	2.6	1.8	.8	1.91*	2.7	1.9	.8	2.18**
Beh. with Others	3.2	1.7	1.5	5.85**	3.4	1.6	1.8	6.78**
Grooming	3.0	2.0	1.0	3.89**	2.9	2.2	.7	3.36**
Get. Along in School	3.8	1.0	2.8	11.47**	3.5	1.4	2.1	8.15**
Indep. from Home	2.6	1.9	.7	2.13**	2.5	2.1	.4	1.00

*Significant at the .05 level; **Significant at the .01 level.

As may be noted from the Table 3.11 column headings, mean comparisons were made separately for ratings summarizing the parent responses and student responses. In all, 16 $\underline{t}$ ratios are reported. Without exception, both for the parent's data and for the student's data, the informant's statements were rated higher (more positively) for the NC sample than for the SI sample. All eight of the comparisons for the parent data and all but the last comparison for student data were significant at the .05 level or beyond, confirming the expected negative relationship between social incompetency and the favorableness of reports of the various students' behaviors discussed in the interview.

Examinations of the individual interview ratings revealed only occasional instances of the "very well" ratings (11 of the 270[1] ratings) and not too many more (48 of the 270) "moderately well" ratings made for the SI student reports. Contrariwise, 102 of the 270 report sections for these students were rated either "poorly" or "very poorly". The NC students behaviors, on the other hand, were almost universally described as either "very well" (101 of the 270 ratings) or "moderately well"(another 110 of the 270 ratings).

The only reporting areas with even a ten percent ratio of low ratings were the gets along "with parents" and "with siblings" areas. Together these two intra-family reports accounted for the one "very poorly" rating and two-thirds of the sixteen "poorly"ratings (out of a possible 270 ratings) accumulated by the NC students. Clearly the home interview reports echo the initial teacher identifications.

A question of interest partially answerable from the mean entries in Table 3.11 is that of similarity of the interview ratings based on the parents' responses to those of their son or daughter. Analyses of these data were made in terms of matched $\underline{t}$'s. Table 3.12 presents the summary of these comparisons between the parent and student means for the eight rated interview sections. These comparisons were made separately for the SI and NC samples.

As may be noted from the mean differences columns in Table 3.12, these differences were typically near zero. None yielded a significant $\underline{t}$ (at the .05 level), all these differences therefore being accountable by chance factors. The closeness of the means suggests that to a considerable extent the interviewer ratings made of the parents' and of the students' reports must have been the same or very nearly the same.

Examination of individual interview ratings supports this expectation. Fully half of the 269[2] pairs of parent-student ratings were identical and nearly all (85 percent) of the discrepancies were only a single scale difference.

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[1]This 270 figure is based on interviewer ratings of 17 SI and 17 NC students described by parents and by themselves in eight reporting areas, or a total of 272 ratings, minus two missing ratings, for each interview sample.

[2]One further pair lost due to missing data (see prior footnote).

Table 3.12

Summary Data for Comparisons of Interview Ratings for Parents and Students

Interview Section	NC's				SI's			
	Means				Means			
	Parent	Student	Diff.	t	Parent	Student	Diff.	t
Peers	3.7	3.6	.1	.81	1.8	1.9	-.1	.32
Adults	3.3	2.9	.4	1.69	2.2	1.6	.6	1.50
Parents	2.9	2.6	.3	.99	1.8	1.5	.3	1.10
Sibling	2.6	2.7	-.1	.46	1.8	1.9	-.1	.69
Beh. with Others	3.2	3.4	-.1	.56	1.7	1.6	.1	.37
Grooming	3.0	2.9	.1	.04	2.0	2.2	-.2	.85
Get. Along in School	3.8	3.5	.3	1.57	1.0	1.4	-.4	1.51
Indep. From Home	2.6	2.5	.1	.27	1.9	2.1	-.1	.56

Discrepancies were very similarly distributed for the SI and NC students; the less favorably described SI student independently (that is, in private interview) agreed with his parent's statements about him as closely as did the more favorably described NC student with his parent.

Excepting two of the eight reporting areas, discrepancies were very evenly distributed across areas and further more were about equal in terms of the student's describing himself more favorably or less favorably than did his parent. The two exceptions were the gets along "with adults" and "with parents" areas which together accounted for nearly a third of the parent-student discrepancies and on which the parent most commonly described his son's or daughter's behavior less favorably than did that son or daughter. However, even in these least agreement areas, nearly 40 percent perfect agreement and only two instances of opposite or nearly opposite reporting occurred. The predominate finding for the eight rating scales for SI's and NC's alike was very substantial parent-student agreement.

An especially interesting section of the interview report schedule was the "satisfaction" checklist. Unlike the previously discussed ratings which are based on reported behaviors, the concept of "satisfaction" tends to confound present behaving with a less explicit goal or standard. On the other hand, the checklist responses require less interpretation by the interviewer.

The satisfaction checklist used in the home interview schedule involved seven areas, each a three-option scale, "satisfied", "generally satisfied but want to see improvement", and "very concerned, needs much improvement". The seven areas were: (1) home behavior, (2) school behavior, (3) social relationships, (4) attitudes and values, (5) disposition, (6) dependability, and (7) goals for the future. Rather than reporting means, the simple three-option scale permits a more readily interpretable frequency reporting of the different satisfaction options checked by the parents of the SI and NC students and by these students themselves. These frequencies are presented in Table 3.13.

Table 3.13

Frequency of NC and SI Parents' and Students' Checking the "Satisfied", "Generally Satisfied but Wants Improvement", and "Needs Much Improvement" Options on Seven Areas of Student Behavior on the Home Interview Schedule

	"Satisfied"		"Gen. Satisfied but Wants Improve."		"Needs Much Improve."	
	NC	SI	NC	SI	NC	SI
Parent Responses						
Home Beh.	9	7	8	9	0	1
School Beh.	16	7	1	7	0	3
Social Relation.	14	9	3	8	0	0
Atti. and Values	11	8	6	7	0	2
Disposition	10	10	7	6	0	1
Dependability	15	6	2	9	0	2
Goals for Future	13	8	3	4	0	1
Student Responses						
Home Beh.	7	8	9	7	1	2
School Beh.	10	10	7	5	0	2
Social Relation.	13	11	4	6	0	0
Atti. and Values	10	9	7	5	0	2
Disposition	8	10	8	6	1	1
Dependability	14	11	3	6	0	0
Goals for Future	7	15	7	2	2	0

Perhaps the most striking information in the tabled frequencies is the scarcity of "needs much improvement" checks, particularly for the SI group. This response option was used less than ten percent of the time by the parents of the SI students and never by the parents of the NC students. The students themselves were similar to their parents in this regard, only seven admissions of "needs improvement" checked by the SI students and three by the NC students. Considering that both the parents and their SI students had both just previously described their sons' and daughters' behavior (or their own in the case of student interviews) as poor and inadequate with respect to nearly 40 percent of the reporting areas rated by the interviewer, their failure to indicate dissatisfaction and need of change is surprising. Even the "generally satisfied but want to see improvement" option was used less than 50 percent of the time by parents of SI students and only a third of the time by the SI students themselves.

The high frequencies of "satisfied" checks by both the parents and their SI sons or daughters, though a necessary counterpart given their low dissatisfaction checks, also warrants comment. Though only 18 percent of the SI behavior descriptions made by their parents or themselves could be rated even "moderately well", the parents then checked "satisfied" over half of the time, the students over 70 percent of the time. Apparently a willingness to negatively describe another's or one's own behavior does not obligate a conclusion of dissatisfaction or desire for change for many of the parents and students interviewed.

Examination of individual parent-student pairings of responses on the satisfaction checklist indicated very high agreement, that is, a sizeable majority of identical checks for both the SI and NC groups. About a third of the responses by either group disagreed by one scale separation, principally in the direction of students expressing more dissatisfaction with their behaviors and attitudes than did their parents.

In summary, the interview reports provided confirmation of the earlier teacher nominations and in-school test data. The following subsection will more fully discuss these several data together with school record information not previously examined.

F. Summary of Eugene Area Testing of SI, SC, and NC Students

Before summarizing the preceding comparison data for the SI, SC, and NC students from the two Eugene Area schools, further description of who they are, their general school behaviors and family settings, needs to be entered.

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[1] Less so on such specifics as number of home chores where the correlations between the SAQ home chore count and those from either the student's or parent's interview were below .22. However, change of season (spring to winter) and the six month developmental growth of the students, work against close repeatability for this kind of data.

Table 3.14

Frequency Distributions of CA, IQ, GPA, Absences, and Counselor General Descriptions of Academic and Social Relations of SI, SC, and NC Students

	N	Mean	CA 156	156-161	162-167	168-173	173
SI	61	167.0	10 (16)	9 (15)	9 (15)	16 (26)	17 (28)
SC	59	165.5	7 (12)	16 (27)	11 (19)	14 (24)	11 (19)
NC	23	170.1	2 (9)	5 (22)	6 (26)	6 (26)	4 (17)

	N	Mean	IQ 70	70-84	85-99	100-114	114
SI	52	87.8	10 (19)	13 (25)	14 (27)	10 (19)	5 (10)
SC	50	102.5	3 (6)	4 (8)	10 (20)	21 (42)	12 (24)
NC	22	114.5	0	0	0	13 (59)	9 (41)

	N	Mean	GPA[1] 1.0	1.0-1.99	2.0-2.99	3.0
SI	60	1.60	9 (15)	31 (52)	20 (33)	0
SC	56	2.50	0	8 (14)	36 (64)	12 (21)
NC	23	3.41	0	0	4 (17)	19 (83)

	N	Mean	Absences 0-4	5-14	15-24	25-34	34
SI	58	15.08	10 (17)	25 (43)	13 (22)	4 (7)	6 (10)
SC	51	6.76	25 (49)	19 (37)	7 (14)	0	0
NC	21	4.52	14 (67)	6 (28)	1 (5)	0	0

		Counselor Descriptions (How is Student Getting Along)[2]								
	N	Academically Poor.	F.Well	Satis.	With Students Poor.	F.Well	Satis.	With Teachers Poor.	F.Well	Satis.
SI	33	20 (60)	6 (18)	7 (21)	9 (28)	16 (50)	7 (22)	10 (31)	10 (31)	12 (38)
SC	32	3 (10)	5 (17)	22 (73)	0 -	10 (31)	22 (69)	4 (12)	2 (6)	26 (81)
NC	15	0 -	0 -	15 (100)	0 -	1 (7)	14 (93)	0 -	0 -	15 (100)

Note: Parenthetical entries to the right of or below the frequencies are percentages.

[1] A=4, B=3, C=2, D=1, F=0.

[2] Two "Don't know" replies for SC students under "Academically" and one for an SI student under both "Students" and "Teachers" are omitted.

These data are summarizations from school record information, school counselor interviews, and a one-page mailed socio-economic survey. Table 3.14 provides abbreviated distributions of scores and/or tallies for these various data.

As earlier reported in terms of means and ranges (see Table 3.1), the 67 SI's, 59 SC's, and 23 NC's constituting the study samples, though very similar with respect to age distributions, are clearly not alike with respect to sex or IQ. Regarding sex, roughly a third more boys than girls were nominated SI, and the opposite, approximately half again as many girls were nominated NC as were boys. Regarding IQ, nearly all the 29 students with IQ's below 85 are to be found in the SI sample, only seven are in the SC sample, and no student with an IQ below 100 is in the NC sample.[1] Though students with IQ's above 114 were to be found in all three samples, they accounted for 41 percent of the NC students, 24 percent of the SC students and 10 percent of the SI students.

School grades provide a more directly relevant school performance measure. As might well be anticipated both by the IQ distributions and by the teacher descriptions and PSIC responses, the samples are very different with respect to GPA. Eighty-three percent of the NC students but not one SI student had a GPA 3.0 or above. Sixty-seven percent of the SI students but not one NC student had a GPA below 2.0. The SC students were a middle group with 64 percent earning GPA's in the 2.0 to 2.99 range.

School absences again provided pronounced NC, SC, SI sample separations with only one NC student having missed more than 14 school days as contrasted with seven (14 percent) of the SC's and 23 (39 percent) of the SI's. At the high attendance end, approximately two-thirds of the NC's, half of the SC's but only one in six of the SI's missed fewer than five days of school.

At the time the teacher descriptions were being collected, the school counselors in both schools were interviewed using a general student description check list form. The fourth section of Table 3.14 summarizes school counselor replies to the question, "How is the student getting along?", asked with respect to his academic work, his relations with other students, and his relations with his teachers. Counselor replies were tallied as either "satisfactorily", "fairly well", "poorly" or "don't know". This latter category was used for only 4 of the 237 replies and is not included in the table.

As may be seen from the tabled frequencies, the counselor descriptions were much in agreement with the independently collected teacher descriptions. With only one exception in the "student relations" area,

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[1] These figures, of course, apply only to the 125 students having IQ data in their school records.

all the NC's were described as getting along satisfactorily in all three areas. "Satisfactorily" replies were also very frequent for the SC students, roughly three out of four in each area, and the "poorly" response was chosen only seven percent of the time. Pretty much the reverse was true for the SI students; roughly only one student in four in each area received "satisfactorily" descriptions, and the "poorly" response used nearly a third of the time for describing relations with other students and with teachers and 60 percent of the time with respect to academics.

Table 3.15 presents frequency distributions for descriptions of the SI, SC, and NC samples obtained from the replies on the social-economic survey completed by the students' parents. Though comparable generalization to the full SI, SC, and NC samples is precluded because of the large number of non returns (possibly due to the somewhat private nature of the data) and particularly because of the disproportionately smaller number of SI replies, the data is reported here as the only data available to the project concerning these characteristics of the three samples. The frequencies presented in Table 3.15 contrast the number of family members at home, annual family incomes, and years of parents' formal schooling for the SI, SC, and NC study samples.

As revealed in Table 3.15, the distributions of family sizes reported on their socio-economic survey forms were about the same for the three competency level groups, with roughly half of all families having either four or five at home persons. Annual family income, however, varied considerably between groups, with an average reported income of nearly $10,000 for the NC families and below $6,000 for the SI families. One-fourth of the SI families reported incomes below $4,000, one-twelfth of the SC families, and none of the NC families. Only one SI family reported an income above $9,000, as contrasted with nearly a third of the SC families and nearly half of the NC families.

These intergroup differences, though somewhat less pronounced, maintained for number of years of parents' formal schooling. The basic similarity is that two-thirds of the parents of all three groups completed high school. However, only one SI family reported continuing beyond high school as contrasted with nearly a third of the SC and NC groups. Further, the percentages were practically reversed at the low end of the scale; 29 percent of the SI families reported that they left school at or below the 8th grade, half that percentage of SC families, and only one NC family.

In summarization, the foregoing school records, counselor descriptions, and family data reveal the teacher-nominated socially incompetent student as more likely a male (6 out of 10), having below average IQ (7 out of 10), typically doing failing or near failing school work (7 out of 10), infrequently having good school attendance (2 out of 10) and infrequently considered by his counselor as getting along satisfactorily either academically or with other students (2 in 10). His family's

Table 3.15

Frequency Distributions of Size of Family at Home, Family Income, and Parent's Education Reported by Parents of SI, SC, and NC Students

	N	$\bar{x}$	Size of Family at Home					
			3	4	5	6	7	>7
SI	23	5.0	5 (22)	3 (13)	7 (30)	6 (26)	1 (4)	1 (4)
SC	40	5.0	2 (5)	15 (38)	13 (32)	5 (12)	3 (8)	2 (4)
NC	15	4.8	2 (13)	6 (40)	3 (20)	2 (13)	2 (13)	

	N	$\bar{x}$	Annual Family Income			
			<4000	4-6000	7-9000	>9000
SI	24	5,8	6 (25)	4 (17)	13 (54)	1 (4)
SC	35	8.1	3 (8)	6 (17)	16 (46)	10 (28)
NC	15	9.9	0	2 (13)	6 (40)	7 (47)

	N	$\bar{x}$	School Years of Parent's Education			
			<9	9-11	12	>12
SI	24	10.7	7 (29)	1 (4)	15 (62)	1 (4)
SC	34	11.6	5 (15)	6 (18)	13 (38)	10 (29)
NC	15	12.7	1 (7)	2 (13)	7 (47)	5 (33)

Note: Parenthetical entries below or to the right of frequencies are percentages.

annual income is likely lower than that of his average classmate (1 in 4 below $4,000), and there is a reasonable chance that his parents did not receive any formal schooling beyond junior high school (1 out of 3). From information based on the several school and family descriptors just discussed, he would be indistinguishable from his classmates only in terms of age or family size. This group represents roughly ten percent of the total student population.

At the other extreme, the student nominated by his teachers as competent is more likely a female (6 out of 10 NC's), always above average IQ, commonly receiving high grades (8 out of 10) --never below a C average, typically missing few school days (7 out of 10), practically always considered as doing satisfactorily by his counselor in both academic and social relations areas. She is unlikely to be from a home in which the annual income is below $7,000 (2 out of 15), or in which the parents have not at least completed high school (3 out of 15). This group represented roughly five percent of the student population.

The SC students, though more like the NC than the SI students, fell in between on all these school and home measures. This group represents about 20 percent of the student population.[1]

Essentially, the Section II data documents a high degree of inter-teacher agreement and repeatability in separating these poorly performing students from their average and above average classmates. The separation dimension given these teachers, however, was social incompetency. In further describing the "behaviors" of their selected students, the favored competent students received only positive descriptions principally dealing with their personal traits such as pleasant disposition (happy and smiling, etc.), sensitivity to others' feelings, and helpfulness and cooperation. The behavioral focus of the teacher descriptions of the socially incompetent students differed for the two schools sampled, with one school emphasizing poor social relations to the near neglect of deportment and the second school quite the reverse. For neither the NC nor the SI students was academic functioning emphasized nearly as much as were social relations and deportment.

Returning now to a consideration of the data presented in this section, without exception, means for students identified as socially incompetent were lower on all the experimental tests and outside school activity reports and home interview ratings than were means for their more favorably identified classmates. Distinctions between the SC and NC groups, though generally favoring the latter students, were not as clearly drawn. Considering first the experimental tests, the social

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[1] This middle SC group was selected from the 129 students not nominated either SI or NC by any of their teachers.

inference measure revealed the SI student as less able to correctly interpret social cues, the information measures as describing himself as less knowledgeable concerning persons important to him, the social relations measures as viewing these persons as less favorably interacting with others. Together these measures suggest a deficit (as contrasted to his higher scoring classmates) in apprehending his social environment both in terms of content and support.

The non-school descriptions of the SAQ add to this deficit in terms of fewer home activities and less individual responsibility and initiative in the away-from-home activities for the teacher-identified social incompetent. The home interviews conducted with parents and the students themselves further enlarged upon this description by providing predominantly negative reports of the SI's relations with his peers, adults, parents, and siblings. Only for the latter two family persons were the behaviors of any of the NC students described as less than getting along "moderately well".

School achievement reports perhaps most widely separated the NC-SI interviewee groups, SI parents describing their son or daughter and SI students describing themselves as getting along less than satisfactorily in school. Only in terms of "satisfaction" were seeming inconsistencies in their data obtained; few SI students and fewer of their parents admitted to "needs much improvement". Expressed dissatisfaction apparently does not necessarily follow from admittedly unsatisfactory performance.

In the introductory section, the problem of definition of social incompetency was posed as a major first task to its measurement. It was further suggested that in large part this definition resided in the selection of the arbiter, i.e., who the judge was. In support of project emphasis on the school setting, the classroom teacher was selected as the central arbiter. His identifications were oriented toward school performance.

In both schools studied, poor school achievers crowded the incompetent nominee lists. Students from poorer homes and less well educated parents were also disproportionately represented. In writing behavioral descriptions about their SI's, teachers stressed deportment problems and poor social relations ahead of low academic achievement. Tests related to social comprehension and awareness discriminated against these "incompetent" students. But differences between teacher nominees extended to their behaviors and activities outside of school as well. School counselors noted these students' poor peer and adult relations. So did their parents. So did the students themselves.

The data may generally be summarized as revealing an "incompentence syndrome" composed of unsubstantial school work, disruptive school behaviors, negative school and home environmental responses, poor social relations, deficient social understandings and awarenesses, and negative (deprecating) self appraisal. The following chapter will examine the generality of this incompetence syndrome for adolescents attending predominantly black neighborhood schools in an urban area.

SECTION IV

DESCRIPTION AND ANALYSIS OF PORTLAND TESTING DATA

A. Portland Testing Program

The present section describes the Portland testing program involving the total attending eighth grade populations in two Portland elementary schools serving the Albina District in Portland. This testing program was planned both as an extension of the Eugene area testing described in the previous sections and to provide evaluation data for trials of experimental social competency units in these two schools.

The Albina District is a highly concentrated, low income, predominantly black community in the northeast section of Portland. The nine elementary schools in this area, identified as having among the lowest achievement levels and lowest income levels in the city[1], had been selected in 1966 as Model Schools to receive assistance directed at helping pupils achieve greater school success. The two schools providing the study samples were recommended by the Office of the District Superintendent as best fulfilling both the project needs for several classes of upper elementary students, a sufficiently flexible schedule for testing and trial of the units, and an especially cooperative and supportive staff. It perhaps should be added that these schools were among the more difficult schools in the district, with high rates of absence and suspension and low reading and writing skills, and would perhaps especially profit from trial of the remedial units.

The first school, School N, had an enrollment of 540 pupils, including 85 eighth graders, and a teaching staff of some 45 teachers. Its ratio of black pupils to white was 98:2. The second school, School M, had an enrollment of 650 pupils, of whom 83 were eighth graders. It had 35 teachers. Its ratio of black pupils to white was 75:25. The administrators of both schools welcomed the project and fully agreed to support the testing program and experimental units during the fall of 1971. A description of the Portland testing sample in terms of sex, race, age, and recorded IQ is presented in Table 4.1.

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[1] "...The percentage of children from families receiving public assistance with low income in these schools ranges from 10.5% to 43% and school achievement means ranged from .85 to 2.62 standard deviations below the city-wide school means." (Report to the Board of Education, School District One, 1968).

Table 4.1

Description of the Portland Test Sample in Terms of Sex, CA, IQ, and Race

	N	Race			CA		IQ[1]	
		Black	White	Other	Mean	Range	Mean	Range
School N								
Male	41	39	2	0	163.8	153-181	90.5	65-98
Female	44	40	3	1	162.9	155-177	87.3	74-103
Total	85	79	5	1	163.4	153-181	89.5	65-103
School M								
Male	35	24	11	0	162.1	155-176	97.8	70-125
Female	48	33	11	4	163.2	155-182	89.6	84-113
Total	83	57	22	4	162.7	155-182	93.0	70-125
Total Sample	168	136	27	5	163.0	153-182	91.3	65-125

[1] IQ's were available for only 52 students. These IQ's were principally based on the Kuhlmann-Anderson Test as recorded in the student's school record folder.

Aside from the uniqueness of the Eugene area samples tested (students from relatively small, semi-rural, all white junior high schools), a serious limitation of the initial experimental testing data was that it was not suited to simultaneous examination of various test scores obtained for the different competency level students. Because of the time consuming individual testing, only a limited number of students had received all tests, too few to recommend multivariate analyses; of the 149 consensually teacher-identified School B and C students only 41 had full data from as many as three of the four major experimental measures. Accordingly, a requirement of the project's second testing effort was to maximize student sample size.

The testing program for the predominantly black student populations in Portland was planned during the summer of 1971. Continuity with the Eugene area samples was desired, but because of differences in the testing settings, and most particularly because of the intended large sampling of students and the concomitant requirement for group testing instead of individual testing instruments, close approximations of the testing instruments used earlier were precluded.

As was reported in Section III, the testing of the Eugene area samples involved experimental measures of (a) the students' social-inferential ability using the Test of Social Inference, (b) his self-descriptions and estimates of how his teachers would describe him, (c) his knowledge of persons important to him and his judgment of those persons' social relations, (d) his reports of non-school activities both in terms of number of activities and his initiation and self-direction of these activities, and (e) interview reports of his parents' and his own descriptions of and satisfaction with how well he was getting along with peers, parents, and other adults, and with his school activities.

Generally, the Portland testing plan followed these earlier test emphases. A social inference test for group administration was developed to measure the students' ability to interpret social situations. This test involved a multiple choice format using a set of pictures of social activities requiring student interpretation.

Using a partially experimenter supplied, partially student supplied listing of peers and adults, student ratings of how well they (the students) get along with their listed persons were obtained. Teachers made similar ratings of their students. Student estimates of how these listed persons, including their teachers, rated them were also obtained. These rating and estimating procedures provided a number of measures of social relationships, how the students perceived themselves as relating to various groups of other persons (classmates, other similar age acquaintances, school adults, other adults they had listed), how they believed these other persons considered them, how their classmates and teachers rated their social interactions, and how aware they were as to how others rated them.

In addition, student self-descriptions were obtained both using a self-appraisal inventory with subscales pertaining to family, scholastics, peers, and general self-concept, and an attitude-towards-school scale with subscales focusing on attitudes toward teachers, school in general, school work, and peers. As with the Eugene students, scholastic reports and teacher comments were abstracted from the Portland students' school records to provide a broader base for describing these students' school behaviors.

A major data addition for the Portland sample was the daily teachers' ratings of their students' class preparation, contribution, and disruptive behaviors. Later interviews with eighth grade home room teachers and with unit leaders concerning their students' social behaviors provided more summative student descriptions. Individual home interviews with parents and students were not conducted for the Portland sample, principally because of time and cost limitations.

Though all eighth grade classes were tested both before and after conducting trials of two experimental educational units, one in each of two classes, the intended evaluations of these units using pre-/post-test differences were not made due to management problems in conducting the experimental units (see Section V).

The first testing was scheduled during the fourth week of the school term, the post-test eleven weeks later, one week preceding the Christmas holiday. To increase the observational periods and the stability of the classroom teacher ratings, these ratings were made during three different five-day periods, the week of th pre-testing, one to three weeks[1] prior to the post-testing, and the fifth week after the Christmas vacation. The teacher - unit leader interviews were conducted following this third rating period. The school record data was examined first during the fall and then more briefly in May the close of the school year[2] to note additional teacher entries.

The following subsections afford a more complete description of the experimental tests used, class and student score distributions on these tests, and a description of the interrelatedness of these test scores with teacher-centered measures of the student's school behaviors. The development and trial testing of the experimental educational unit is described in the next section of this project report. The final section offers a tying in of the results and conclusions from both the Eugene area and Portland data.

B. Testing Instruments

1. Picture Interpretation Test. As described in Section III.A.1[3], the Test of Social Inference (TSI) is an individually administered picture interpretation test scored to provide measures of the student's social inferential ability. Though attempts to develop a slide projection administration of the TSI to educable retarded adolescents have been unsuccessful,[4] this method was nonetheless tried as the simplest method for group presentation and possibly feasible with nonretarded eighth graders. A further departure from the earlier group presentation attempt was the preparation of sets of multiple choice response alternatives to accompany the picture presentation and the question asked about each picture.

In preparing the PIT, several hundred pictures appearing in advertising and story sections in recent editions of popular magazines such as Life, Look, Ebony were screened for possible use as stimulus pictures for

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[1] This variable period was occasioned by changes in class schedulings due to parent conferences and related special events.

[2] The 1971-1972 public school year in Portland ended May 11 due to a reduced school budget.

[3] Also see the supplement to this report for an extensive examination of the TSI scores for some 1,000 EMR adolescents in terms of sampling generalizations and relationships with various concomitant variables.

[4] Personal communication from B. Edmonson. Reference to other unsuccessful variations for administering the TSI are reported in Edmonson, de Juno, Leland and Leach. 1971, chapter 2.

testing the adolescent's recognition and understandings of what was happening in a social scene. Current TSI pictures were also considered. A major selection criterion was the project staff's ability to create a set of five, reasonable, brief alternatives to some general question about the picture such as, "What's happening here?", or, "Why is this happening?"

The first experimental set of 19 pictures, each reproduced as a 2x2 black and white slide and shown with an accompanying question and set of alternatives was trial tested in the late spring of 1971 in three junior high school classes in a school district suburban to Tacoma, Washington. On the basis of item difficulties and item-total test relationships, some pictures were deleted and response alternatives rewritten.

The modified test was again trial administered during the summer to a small pre-curriculum trial sample of black School N eighth graders. On the basis of that administration further changes were made in the response alternatives and 15 pictures were retained, the first as a practice picture. In both trial administrations, a mimeographed test booklet with the stimulus questions and their five alternative answers were distributed to the students. A copy of these questions and alternatives is presented in Appendix F. To assist students with reading problems, each question and alternative was read aloud to the class as the corresponding picture was shown. The student's task was simply to circle his preferred response.[1] The test administration required approximately 15 to 20 minutes of class time.

These procedures were retained for both the pre- and post-testing in the Portland schools. In all, 157 students were tested on at least one of the two testings. Testing conditions during the PIT administrations were not ideal, however. One problem was that room lighting and student distance from the projection screen varied in each of the six classrooms, though no student complaints were noted regarding visibility of the pictures. Imprecise focusing and unsteady projection also occurred for teachers less adept at using the slide projector. Student recollection of their earlier trial testing was apparent from some of their remarks during the testing.

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[1] An attempt to more expansively measure the student's understandings and interpretations of the PIT pictures by allowing open-ended, free responses to an added set of four pictures was abandoned due to problems with illegible handwriting and the extreme dependence of these responses upon written language abilities. Trial scoring of these free responses correlated only .35 with the multiple choice part of the PIT for 67 School N students with readable papers.

The PIT was scored simply as the number of items correct with a maximum possible score of 14 and a minimum of zero. The pre- and post-test PIT means for the six classes of Portland eighth graders are presented in Table 4.2. As may be noted from the generally low means of five or six items correct in Table 4.2, the PIT was a generally difficult

Table 4.2

Pre- and Post-Test PIT Means for Six Classes of Eighth Graders

Class No.	School N			School M			Total
	1	2	3	4	5	6	
N*	28	27	25	25	27	25	157
Pre-Test	5.9	5.4	5.4	6.4	5.6	5.6	5.7
Post-Test	6.2	6.7	6.7	6.6	6.6	6.4	6.3

*Number of students completing either the pre- or the post-test or both.

test for the eighth graders tested. A chance score for the 14-item test would be 2.8. The class standard deviations of approximately two items in all classes indicated a reasonable spread of scores. For the total group, PIT scores ranged from zero to nine on the first testing and from four to ten on the second testing. Comparison across classes reveals fairly constant means both for the first testing and again for the second testing.

In all classes, fewer errors were made on the retesting, second test class means consistently being higher than first test means. However, examination of individual score changes reveals considerable individual variation here too, with a third of the students achieving lower scores on their second testing and another twelve percent with unchanged scores. Though nearly half of the students changed their score by only one item or less (another 22 percent changing by two items), this variability in direction resulted in a pre/post-test correlation of only .28. Quite possibly the variable room lighting and imprecise focusing of the slide projector may have affected different students differently. Though the unsatisfactory retest coefficient suggested minimal usefulness of the PIT score in further analyses, the possibility that a sufficiently improved score stability would result from combining the pre-and post-test scores into a simple double length measure led to its retention as a combined pre/post-test score in examining the interrelations among the other test scores.

2. The Self Appraisal Inventory. The Self Appraisal Inventory (SAI) was developed by the UCLA Center for the Study of Evaluation, Instructional Objectives Exchange, as one of several experimental measures for assessing educational programs designed to improve learners' self concepts. The inventory contains 80 fairly direct self-report

statements written in the first person. Twenty of the statements pertained to the dimension of family self-concept, i.e., one' self esteem generated from family interactions, a second set of a peer dimension, i.e., one's self-esteem associated with peer relations, a third set to a scholastic dimension, i.e., one's self-esteem derived from success or failure in scholastic efforts, and a final set to a general dimension, i.e., a comprehensive estimate of how self is esteemed. (IOX, 1970, pp.5-6).

The inventory is administrable either as a true-false scale or as a four-point Likert scale of strongly agree, agree, disagree, and strongly disagree. Scoring guides are provided for the scoring of four 20-item subscales (family, peer, scholastic, and general), as well as a total 80-item score. On the basis of the summer trial testing with the small School N sample, the simpler true-false administration was used for the pre-test. The lack of apparent problems during this testing and the considerable loss of possibly discriminatory data mitigated against continued use of the dichotomous response form. The lack of student difficulty in using the four-point Likert response form on the post-test administration of the SAI supported this decision to modify the testing procedure.[1] For both test administrations, all statements were read aloud to the students, the test administrations each requiring approximately 20 minutes. The 80-item Likert scale form of the SAI is presented in Appendix G. The pre- and post-test SAI means for the six classes of Portland eighth graders is presented in Table 4.3.

For the first test, the subscales of the SAI were scored simply as the number of favorably worded items the student checked as true of himself plus the number of negatively worded items which he checked as not true of himself. The possible range of subtest scores was from zero to 20 for each subtest. On the post-test, "strongly agree", "agree", "disagree", "strongly disagree" for positively worded items were scored 4, 3, 2, and 1, respectively, and the reverse, 1, 2, 3, and 4, for negatively worded items. The possible range of subtest scores on the post-test was therefore from 20 to 80. A neutral score on the true-false and Likert type scale administration would be 10 and 50, respectively. As may be noted from the Table 4.3 class means entries, with a partial exception of the scholastic subscale, all classes averaged consistently above the neutral area of the scale.

Correlations between subscale scores were generally moderate, ranging from the low .40's to the mid .60's, suggesting reasonable independence among the four sets of SAI items. Inspection of individual student scores on the peer, family, and general subscales for the true-false administration revealed less than one in seven students selecting more negative than positive SAI items in describing themselves. For the scholastic subscale, this ratio increased to one in four students. Inspection of the individual student subscales scores for the four-point scale readministration of the SAI revealed nearly identical low proportions of students scoring below the neutral score of 50 on each of the four scales.

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[1] However, in terms of the present Portland data, this modification to a four-point scale did not appear to add to interpupil or interscale score discriminations. Revisions of the SAI are presently being considered by the UCLA test developers.

Table 4.3

Pre- and Post-Test SAI Means for Six Classes of 8th Graders

Class No.	School N 1	2	3	School M 4	5	6	Total
N*	25	25	23	26	26	24	149
Peers							
Pre	14	13	12	13	12	14	13
Post	55	55	56	55	52	57	55
Family							
Pre	15	16	13	15	13	15	14
Post	56	57	56	55	55	58	56
Scholastic							
Pre	12	13	12	12	10	14	12
Post	54	53	51	50	54	54	53
General							
Pre	14	13	12	14	14	14	14
Post	56	55	55	58	55	57	56
Total							
Pre	55	55	50	54	49	57	53
Post	220	220	218	219	214	226	220

*Number of students completing either the pre- or post-test or both.

Examination of the stability of SAI subscale scores over the ten week retest period was difficult due to change in response format. Scatterplots of individual subscales revealed roughly a fourth of the students earning retest scores within two score points of the same relative position they received on the basis of the first testing. Approximately an equal number of students had higher or lower relative post-test scores, most (approximately half of all students tested) with retest scores within another five score points of the scatterplot diagonal representing no relative change.

Product moment correlations between the first and second administration SAI subscale scores were .54, .54, .60, and .39 for the peers, family, scholastic, and general subscales, respectively. Since these coefficients may be regarded as a lower estimate of the subtests' reliability (involving as they do a change in test response format and a ten-week interval), improved score stability is to be recommended before further analysis. Accordingly, "double length" scores were computed for each student for each of his four SAI subscales. In effect, these new subscale scores were summations of standard scores, the weighting equation roughly equivalent to adding half the second administration score to the first test administration score.

3. Pupil Opinion Questionnaire. The Pupil Opinion Questionnaire (POQ) is a 60-item Likert scale, developed by the Kansas City Youth Development Project (Glick, 1967) for use with upper elementary school children. The authors describe the items as designed on an a priori basis to tap distinguishable attitudes toward four "aspects" of the school experience, teachers, school in general, school work, and peers. The POQ accordingly provides four subscales, each based on 15 items. Intercorrelations among the subscale scores were reported as ranging from .55 to .70 and stability coefficients for pupils retested after a seven month interim similarly in the .51 to .71 range. The test authors suggested that the shorter range stability may be considerably higher. A validity study of the total POQ score supported the POQ assessment of attitudes as consistent with independent teacher nominations of their "best" attitude and "worst" attitude students.

The POQ was included in the Portland sample test battery to provide measures of the students' evaluations and feelings about their classroom experiences. Though surface similarities appear among some of the Self Appraisal Inventory and POQ items, the two test formats clearly differ, the SAI written in the first person stressing the respondent's personal involvement and the POQ written mostly in the third person as descriptions of the school setting and the behaviors and feelings of teachers and other pupils. The POQ items are presented as Appendix H.

Students responded to the POQ items by circling a letter next to each statement indicating the extent of their agreement or disagreement, very much, a little, or neither. As with the PIT and SAI, though all students received a copy of the questionnaire, items were nonetheless read aloud to assist poor readers. Approximately 15 minutes of class time were required to read and answer the 60 items. Both the pre-test and post-test of the POQ were administered as part of the two half-days test battery.

The pre- and post-test POQ subtest and total score means for the six classes of Portland eighth graders are presented in Table 4.4.

The subtests were scored according to a key designed by the test authors which provided for possible maximum and minimum subtest scores of 75 and 15, respectively, for pupils consistently reporting high agreement (or high disagreement) with subtest items reflecting positive attitudes and high disagreement (or high agreement) with those reflecting negative attitudes. A neutral subtest score would be around 45. As may be noted from the Table 4.4 entries, class means for most of the subtests were around a score value of 45, none of the 48 class means more than 4 score points above this neutral point and only one class mean more than seven score points below.[1]

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[1] These Portland class means were typically about ten score points lower than those reported for the Kansas City classes of predominantly inner-city students (Glick, 1967.)

Table 4.4

Pre- and Post-Test POQ Means for Six Classes of 8th Graders

Class No.	School N 1	2	3	School M 4	5	6	Total
N*	24	25	24	26	26	25	150
School in General							
Pre	46	49	41	45	35	40	43
Post	44	44	41	38	38	40	41
Schoolwork							
Pre	46	46	45	46	41	45	45
Post	47	48	41	42	42	44	44
Teachers							
Pre	45	49	42	43	38	40	43
Post	46	45	38	44	39	44	42
Peers							
Pre	49	48	46	46	46	46	47
Post	48	47	47	48	45	47	47
Total							
Pre	186	192	175	180	160	170	178
Post	184	183	166	171	164	175	174

*Number of students completing either the pre- or post-test or both.

In effect, very little interclass difference in subtest means was obtained, though one class (Class 5) most typically provided the lowest means.

Inspection of individual student scores on the four POQ subscales revealed that by far the large majority of students' POQ subtest scores fell quite close to their class means. Less than one in ten students received a score below 30, representing an average response of "a little agreement" (or disagreement) with positively (or negatively) worded statements. Subscale POQ standard deviations for both the pre- and post-testing tended to vary between 6 and 11 score points with a median sigma of 8.6. Correlations between subscale scores were reasonably high, ranging from the high .50's to the mid .70's for pairings of the school in general, schoolwork, and teachers subscales but were considerably lower for all pairings of these subscales with the peers subscale, these latter correlations ranging from .13 to a high of only .33.

POQ subscale scores over the ten week retest period were examined for stability in terms of pre-/post-test score scatterplots, which revealed that roughly one-fourth of the students received post-test scores within two score points of their first scores. Another two-fifths of the students had post-test scores within another five score points of their pre-test score. As may have been expected from the generally similar pre- and post-test means, approximately the same number of students had higher (more favorable) pre-test scores as had higher post-test scores.

Product moment correlations between the first and second administration POQ subscale scores were similar to those for the SAI subscales, in particular, r's of .53, .48, .55, and .32 for the school in general, school work, teachers, and peers subscales, respectively. In a sense, these POQ retest coefficients, too, may be interpreted as conservative estimates of the subscales' reliability given a briefer retest interval. However, the somewhat higher coefficients reported for the Kansas City students based on a seven month retest interval (Glick, ibid.) suggests instability problems related more to the particular student sample tested and perhaps to the less than perfect test administration procedures followed.[1] In any event, as with the preceding tests, in the interests of improved score stability "double length" scores were computed for each student for each of his four POQ subscales by summing his pre- and post-test scores.

4. Peer Ratings and Estimating Procedure. The basic format for the peer ratings and estimating procedures used in the Portland testing was the same as that used with samples of Eugene area students described in subsection III. B.3, namely, developing a long list of persons known to the student and requiring him to assign letter grades of either A, B, C, D, or F to each name according to a selected aspect of that person's social relations. Experience with the Eugene area sample had shown that requiring the students to prepare long lists and allowing them a two-day take-home period in which to complete them necessitated repeated reminders, especially to the SI students, to return their lists; therefore the Portland procedures simplified the list writing by beginning each student's recalled persons list for him. He received a booklet in which were the typed names of all other eighth graders in his school and all of the teaching and adult support staff he was likely to know. In effect, each student list thereby began with 75 to 80 names of peers and another 15 to 18 names of adults. The student then deleted names of persons unknown to him and added as many more peers and adults as he could recall in 15 to 20 minutes of his class testing period. Generally, students were cooperative in this regard, typically adding from 10 to 20 peer names and 5 to 15 adult names. In the same class period, the pupils were instructed to grade each person on their lists by circling either A, B, C, D, or F in terms of "how well you get along with them --- not if that person is 'good' or 'bad' but only how well you two get along together".

[1] For example, the examiner's reading of all 60 questions probably slowed down more enthusiastic responding, as did the tail position of this test on the second afternoon of testing.

The rating sheet had provided for columns of A's, B's, C's, D's, and F's next to the typed and added names. These completed columns were cut off by the examiners prior to the second testing day.

On the second day his list of names was returned to the student and he was instructed to again give each listed person a grade of A, B, C, D, or F but this time according to how the student believed that person would, or did, grade him "on how well he or she gets along with you". This estimating task took approximately 15 minutes. During all listing, rating, and estimating tasks, two test proctors moved about the room offering further instruction to slower or less responsive students. The complete recall ratings and estimating instructions together with a copy of a rating sheet page are presented in Appendix I.

The tallying of student ratings and estimates provided several social relations scores. To begin with, the ratings a student made of others provides a self-description of his "socialability", in particular, how successful he perceives and reports himself to be in interacting with other persons. Averages of these "ratings made" were computed separately for ratings made of same sex and of opposite sex persons, and within this breakout, for peers and for adults, and again separately for his grade peers and school adults and for his recalled persons. Because of the smaller number of recalled adult persons, sex breakouts were not made within this subgrouping. Since some students had added few names in a given subgrouping or had neglected to rate very many of them, an arbitrary minimum of four rated names was required for computing averages for any subgrouping.

The same subgroupings were made for the student's estimates. In contrast with the averages for his "ratings made" which focused on the student's self-description of his interactions with others, the average estimates provide measures of the student's perception of how well he is functioning socially in terms of others accepting him, how he believes various groups of other persons like and support him. Both the average ratings made and average estimates are, of course, phenomenologically prescribed measures, that is, bound by the student's unique constructions and interpretations of "what is out there". The difference is simply one of perspective. In effect, the estimates were obtained to add the further dimension of reciprocity, the student being instructed for his second testing session to consider and report not his getting along with "them", but their judgment of himself. The general range of moderate to low correlations between average ratings made and average estimates in part support this distinction as an operational difference.

The estimates were obtained for a further reason, to permit measures of the student's accuracy in describing how others consider him. In a sense, this accuracy is an informational score, knowing how others rate oneself. Operationally, the accuracy score was defined as the average of the differences (ignoring signs) between each estimate made for another and that other's rating made of him. Since ratings of the

students were made only by other eighth graders and by teachers having these students in either their social studies, mathematics, reading, or physical education classes[1], accuracy measures were limited to these subgroups. More specifically, average accuracy scores were computed only for subgroupings of same sex and opposite sex peers and for school adults, combining the sexes in the latter subgrouping.

The final set of social relations measures was similarly limited to subgroupings of same sex and opposite sex peers and school adults. These were the averages of ratings received by a student from those rating him. Characteristically, only moderately low correlations obtain between the ratings made by a rater and those received by him (Gardner and Thompson, 1956; Meyer and de Jung, 1963; de Jung, 1966). The former are based on ratings made by one person describing how he gets along with many other persons while the latter, though descriptions of the same social diads, i.e., the same pairings of two person interactions, reflect the perceptions of many persons. More succinctly, the former are self-description measures and the latter group descriptions, how the group says they get along with the rater. The popular, well-liked, sociable student would surely receive higher ratings than his socially unattractive peer.

The foregoing paragraphs have introduced 15 measures derived from the rating-estimating procedures, five average ratings made, five average estimates made, three averages for accuracy, and two for ratings received. The eight different averages based on grade peer data were first examined separately by class to note whether same class members gave each other higher ratings or estimates than they did students in the other two eighth grade classes. For none of these measures were same class - other class differences systematically or sufficiently large to warrant maintaining separate ratings and estimating means according to the same class - other class designations of the rater-ratee or estimator-estimatee pairings. Accordingly, all the grade peer mean ratings and estimates (and accuracy measures) discussed in this report will be based on all eighth grade ratees and/or estimatees combined.

Examinations were also made of differences in ratings and estimates made according to the sex matching of rater-ratee and estimator-estimatee pairing, i.e., boys rating or estimating other boys or adult males as contrasted with boys rating or estimating girls or adult females, and similarly, girls rating and estimating same and opposite sex persons. As with earlier rating studies (de Jung, 1967; Cross, 1966), stable differences favoring the same sex pairings were found. Though product moment correlations between ratings or between estimates made of the same-sex persons and of opposite sex persons were moderately high (in the .50's and .60's), the fact that typically higher ratings and estimates were made for same sex persons warned against combining same sex and opposite sex data. Excepting the recall persons ratings

[1]These teacher rating procedures are described in the following subsection.

and estimates, where the smaller listing of persons rated or estimated precluded stable sex subgrouping of ratees and estimatees, the same sex-opposite sex means were retained in this report.

The class means for the 16 pre- and post-test social relations measures derived from the rating and estimating procedures are presented in Table 4.5. In computing these means, the letter grades of A, B, C, D, and F were converted to numerical values of 4, 3, 2, 1, and 0, respectively. Higher mean ratings or mean estimates therefore indicate more favorable ratings or estimates. The reverse is true of the means for the accuracy measures which reflect differences between estimates of ratings made and the actual ratings made, that is, lower accuracy means indicate greater accuracy.

As may be noted from Table 4.5 means, the major differences in ratings appeared to be between the different social relations measures rather than between classes. Persons whose names they had added to their lists consistently received the students' highest average ratings and also their highest average expected ratings. These ratings averaged midway between an A and a B. Apparently students predominantly added names of their favored persons, or at any rate, persons with whom they got along better.[1] Generally the class mean estimates tended to mirror the mean ratings, the classes with the highest ratings also expecting the highest ratings in return, and vice versa.

Though the bulk of the ratings and estimates were A's and B's, considerable interstudent variability did occur. Class standard deviations typically approached 1.0 score points or the equivalent of a change in one letter grade. Slightly higher sigmas were obtained for the opposite sex ratings and estimates. A perhaps related finding was the anticipated lower mean ratings and lower estimates for opposite sex peers than for same sex peers. This boy-boy and girl-girl preference was true for all six of the eighth grade classes.

Class means of ratings made and those received were less related, particularly for ratings made and received from school adults, the latter (ratings received) being higher for every class.[2] It should be noted that the same list of school adults is not involved in both the ratings the student makes and those he receives, i.e., he rated from 14 to 18 listed names but he was rated by only four school adults, his social studies, math, reading, and p.e. teachers.

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[1] This had not been true in earlier recall studies in white middle class schools (de Jung, 1967).

[2] It perhaps should be added that to the extent that the mean ratings made and the mean ratings received are both based on the same full groups of raters (as in the case of the means for all classes combined), these group means will be identical (except for rounding errors) since both would be computed from the same matrix of ratings.

Table 4.5

Pre-Test and Post-Test Average Ratings Made, Average Estimates Made, Average Ratings Received, and Average Accuracy Means for Six Classes of 8th Graders

	School N			School M			
Class:	1	2	3	4	5	6	Total
N[1]:	29	29	27	27	28	28	168
Ave. Ratings Made of							
Same Sex Peers							
Pre	3.3	3.0	3.4	2.3	2.5	3.4	2.9
Post	3.3	2.9	3.0	2.4	2.8	2.9	2.9
Opposite Sex Peers							
Pre	2.8	2.5	3.0	1.1	1.9	2.5	2.3
Post	2.6	2.4	2.7	2.0	2.1	2.5	2.4
Recalled Peers							
Pre	3.5	3.4	3.7	3.1	3.3	3.7	3.4
Post	3.5	3.1	3.6	3.5	3.2	3.8	3.5
School Adults							
Pre	3.0	2.9	2.7	2.4	2.6	3.4	2.8
Post	3.1	2.8	2.6	2.5	2.6	3.0	2.8
Recalled Adults							
Pre	3.6	3.7	3.6	3.3	3.1	3.8	3.6
Post	3.5	3.4	3.3	3.6	3.5	3.7	3.5
Ave. Est. of Ratings by							
Same Sex Peers							
Pre	3.3	3.0	3.6	2.5	2.6	3.4	3.1
Post	3.7	2.9	3.2	2.5	3.0	3.1	3.0
Opposite Sex Peers							
Pre	2.9	2.6	3.3	1.3	1.8	2.4	2.4
Post	3.2	2.6	3.0	1.9	2.2	2.6	2.5
Recalled Peers							
Pre	3.6	3.3	3.8	3.4	3.3	3.7	3.5
Post	3.9	3.2	3.5	3.3	3.6	3.6	3.5
School Adults							
Pre	3.3	3.0	3.3	2.4	2.6	3.4	3.0
Post	3.5	2.9	3.1	2.6	2.9	3.0	3.0
Recalled Adults							
Pre	3.6	3.7	3.7	3.3	3.3	3.9	3.6
Post	3.8	3.7	3.2	3.6	3.6	3.7	3.6

[1]Number of students completing either pre- or post-test ratings or both.

Table 4.5 (continued)

Ave. Ratings Rec. from	School N			School M			Total
	1	2	3	4	5	6	
Same Sex Peers							
Pre	3.2	3.3	3.1	2.1	2.4	2.7	2.8
Post	3.0	3.1	2.9	2.7	2.7	2.7	2.9
Opposite Sex Peers							
Pre	2.6	2.7	2.6	2.1	2.1	2.0	2.4
Post	2.6	2.6	2.5	2.1	2.1	2.4	2.4
School Adults							
Pre	3.3	3.1	2.9	3.3	3.4	3.6	3.3
Post	3.6	3.2	3.1	3.0	2.9	3.3	3.2
Accuracy in Estimating Ratings Made by							
Same Sex Peers							
Pre	.8	.9	.8	1.1	1.1	.8	.9
Post	.8	.9	.8	1.1	.9	1.0	.9
Opposite Sex Peers							
Pre	1.1	1.1	.9	1.5	1.5	1.3	1.2
Post	1.0	1.2	1.2	1.2	1.3	1.0	1.2
School Adults							
Pre	.8	.8	.8	1.4	.4	.7	1.0
Post	.4	1.0	.9	.9	1.0	1.0	1.0

Note: A=4, B=3, C=2, D=1, F=0; a lower accuracy score indicates less estimating error.

Accuracy means, i.e., the class averages for estimating how other eighth graders rate oneself generally were about 1.0, or an average error of one letter grade. These class means typically varied among classes less than 0.5. As with the mean ratings and estimates, same sex - opposite sex differences were obtained with all classes revealing greater inaccuracy (higher means) in predicting ratings made by opposite sex peers than by same sex peers.

Considering now the pre-test and post-test entries together, a reasonable stability of class means is to be noted in nearly all instances. Judging from the total classes columns at the right of Table 4.5, post-test changes are about evenly distributed in terms of "gains" and "losses", the total class means remaining nearly identical. Pre-test/post-test correlations for these several social relations measures, however, varied considerably with high of .77 for estimates made of same sex peers and of

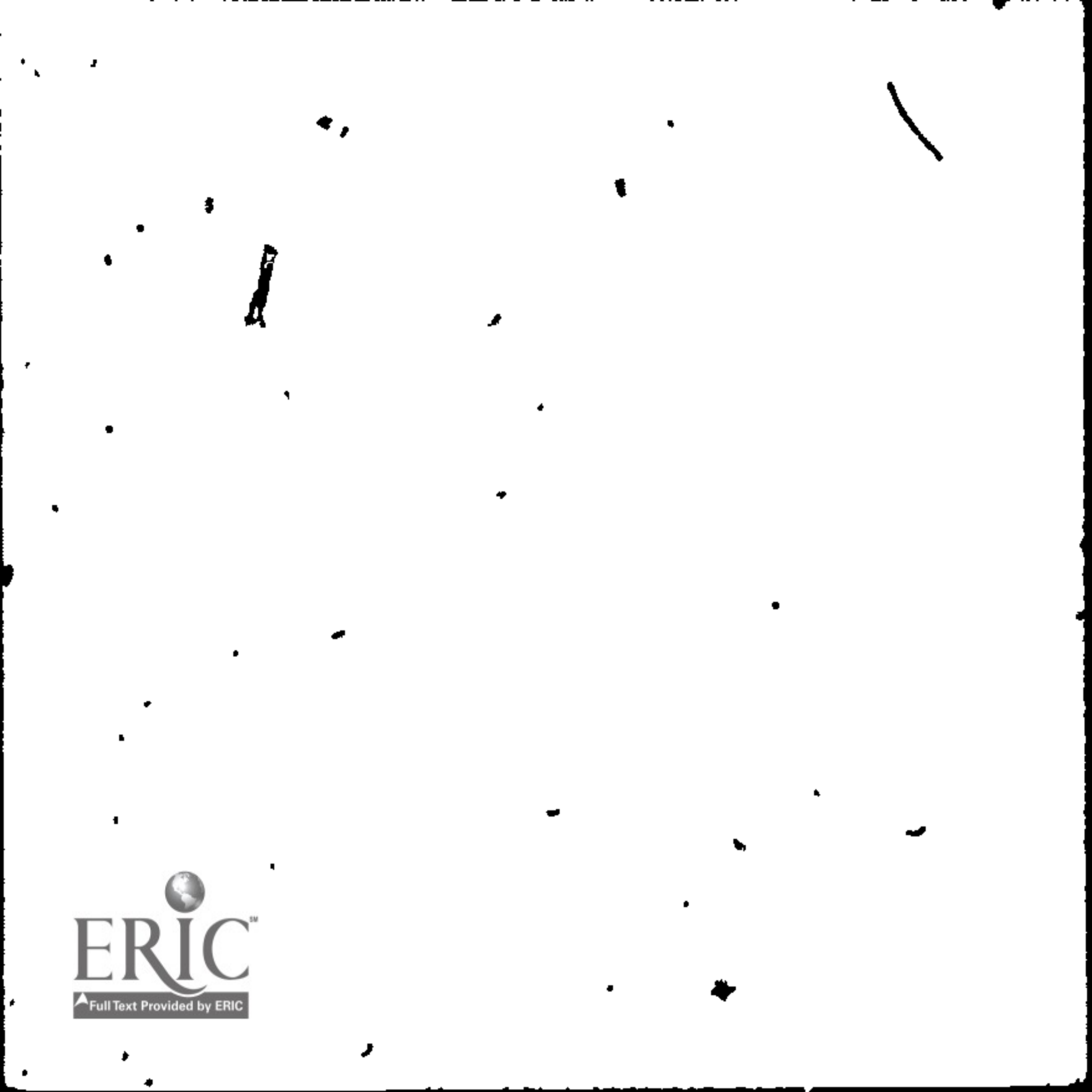
opposite sex peers to slightly lower for the ratings made of grade peers, lower again for the estimates and ratings of recalled peers, and least for ratings and estimates involving adults. These latter social relations measures are expectedly the least stable inasmuch as each student's score tends to be based on fewer persons rated or estimated for. The median test-retest correlations for these social relations measures was .60.

As with the previous data, the individual student ratings, estimates, and accuracy scores on his two test administrations were further examined for changes in terms of scatterplots for each pair of pre- and post-test measures. Half-point score intervals were used in preparing these scatterplots, and counts made of the number of students falling in the major diagonal cells, i.e., receiving a post-test score on a social relations measure within 0.5 score points of their first test score.

For most of the social relations measures, this half grade difference accounted for more than 60 percent of the students. Both the highest and lowest percentages of very nearly identical scores occurred for the accuracy scores. The highest percentages were for the same sex and opposite sex accuracy scores and the lowest percentages were for the estimates of ratings made by their classroom teachers. As with the correlation coefficients, the factor of fewer others to rate or estimate for appears to directly relate to the instability of that rating or estimate. In the absence of systematic test-retest changes and to support both data reduction and increased score stability for further statistical analyses, all of the social relations measures were "double-lengthed" by summing pre- and post test scores.

5. Teacher Ratings. Three daily teacher ratings and two weekly teacher ratings were obtained for the Portland sample from four of their classroom teachers, their social studies teacher who was also their home room teacher, their mathematics teacher, reading teacher, and physical education teacher.

The first set involved three classroom behavior ratings recorded daily by the teachers for a one-week period. The first rating concerned classroom preparation and was made on a four-point scale with scale positions identified as "well prepared", "adequately prepared", "poorly prepared", and "shows no evidence of any preparation". These categories were scored 3, 2, 1, and 0, respectively. The second rating concerned class contribution. This scale also involved four descriptive categories to guide teacher ratings: constructive participation..."the class better off for his having been there", "the class a little better off for his having been there", "the class would have been the same without him", and "the class would have been better off without him — he interfered with the class activities". These categories were scored 2, 1, 0, and -1, respectively, but later converted to a 3, 2, 1, 0 system to avoid negative numbers. The third ratings concerned disruptive behavior and were made on a three-point scale. The rating category descriptions were, "interrupts class activities", "engages in attention drawing behaviors which do not seriously interrupt class activities", and "exhibits no disruptive behaviors". These categories were scored 2, 1, and 0, respectively.



In addition to the three daily ratings, the four classroom teachers were asked to make two more global weekly social ratings of their students on a five-point scale. The first summarized the teacher-student relationship in terms of "how well does he get along with you" and the second summarized the student-student relationship, "how well does he get along with his classmates". The five scale positions recorded as 1 to 5 were worded very similarly to the student social rating and estimating scales described in the previous subsection. The rating instructions to the teacher are provided in Appendix J.

To provide a more complete sampling of classroom behaviors, two subsequent reporting weeks were planned for the teacher ratings, the first scheduled a week preceding the December post-testing[1] and the second another ten weeks later. In all, excepting occasional missing data due to prolonged student absences or rater oversight, each student received fifteen daily classroom behavior ratings and two more general social interaction ratings from each of four of his classroom teachers for each of three reporting periods spaced approximately 10 weeks apart.

In examining this data for reduction possibilities, averages of each teacher's daily ratings were first summed as a weekly rating for each student and correlations between teachers and between rating scales were computed for the first rating, second rating and third rating data separately. For each of these sets of ratings, correlations between ratings made of the same students on the same scales but by different teachers were found to be positive but generally low. The median of 18 interteacher correlations for the classroom preparation ratings was .18; for the class contribution, .21; for the disruptive behavior, .22; for the getting along with classmates ratings, .26; and for the getting along with teacher ratings, .16. On the other hand, correlations between individual teacher ratings and the composite sum of all four teacher ratings were considerably higher for all scales and reporting weeks. The median $\underline{r}$ for the 20 individual composite teacher ratings correlations was .64 for the September (first) ratings, .66 for the November (second) ratings, and .68 for the February (third) ratings. These high to moderately high part-whole correlations suggest data reduction by summing the four teacher ratings for each scale into simple composite ratings for that scale. Excepting the interscale correlations summarized in the next paragraph, all further rating analyses in this section involved such composite ratings.[2]

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[1] Since the testing involved an interruption from regular classes of two full afternoons, the daily teacher ratings could not be obtained that same week and since the following week was a short pre-Christmas week, the closest recording week necessarily preceded the testing. The initial project concern that testing and classroom teacher ratings be chronologically matched became of lesser importance upon subsequent change in focus of pre-post test score changes.

[2] For simplified reporting the descriptor, "composite", is to be understood in referring to the classroom teacher ratings discussed in the remainder of this section.

The interscale differences were similarly examined. For each of the three sets of ratings (September, November, and February), correlations were computed between ratings made by the same teacher of the same students but on different scales. These interscale correlations were found to vary depending on the pair of scales correlated. More specifically, interscale correlations were typically high for the class preparation-class contribution ratings with a median r of .78. Median r's for all other pairings of scales were in the .30 to .46 range. In the interest of further data reduction, the class preparation and contribution ratings were summed into a single classwork rating for further analyses.

Table 4.6 presents the three sets of classroom teachers' rating means for the six classes of Portland eighth graders. For the class preparation and class contribution means, the maximum possible value (based on all "well prepared" or all "constructive participation" ratings, respectively) would be 3.0; the minimum possible, zero. For the disruptive behavior means the maximum possible (based on all "interupts class activities" ratings) would be 2.0; the minimum (and most positive rating) would be zero. The two teacher rating means are scaled similarly to the student ratings with a maximum possible favorable rating of 4.0 and a minimum possible rating of zero.

As may be seen from the Table 4.6 entries, the first (September) classroom teacher ratings of students' class preparation and of their class contribution were generally similar for the six classes in the two schools. For both ratings, all class means were above the scale midpoint of 1.5, ranging less than a half a scale value on either scale. Though interclass variation in class means increased slightly for the two sets of subsequent (November and February) ratings, typically class means remained quite similar.

The disruptive behavior ratings similarly yielded only minor differences between schools or classes. All class means were quite low, indicating most students were rated at the non-disruptive end of the scale. The subsequent sets of class means were each even slightly lower, suggesting fewer negatively rated students as the term progressed and/or upon repeated use of the rating instrument. The correlations between repeated ratings on these two scales varied somewhat with the individual teachers but were typically in the low .60's.

Class means for teacher ratings of their students as to how well each of them gets along with each other and as to how well each of them gets along with that teacher making the rating were all on the favorable side, typically above the "fairly well" scale position of 3.0. These favorable mean ratings generally maintained for the two subsequent scale administrations. Interclass variation among means was moderate though generally less than for the student ratings on the same five-point scale. (See Table 4.5).

The correlations between repeated sets of ratings on the various scales were slightly higher for the second and third administration pairings of ratings than for the first and second administration pairings. The

Table 4.6

Average Teacher Ratings of Student Classroom Behaviors in Three Weekly Rating Periods for Six Classes of Eighth Graders

Class:	School N			School M			Total
	1	2	3	4	5	6	
N[1]	28	29	24	26	28	27	162
Class Preparation							
Sept.	2.2	2.0	1.9	1.8	2.0	1.8	2.0
Nov.	2.5	2.1	1.8	2.0	2.0	2.0	2.1
Feb.	2.6	2.2	1.8	1.9	1.8	1.9	2.0
Class Contribution							
Sept.	2.2	2.1	2.0	2.2	2.4	2.0	2.2
Nov.	2.3	2.1	2.0	2.2	2.3	2.3	2.2
Feb.	2.6	2.4	2.2	2.1	2.0	2.0	2.2
Disruptive Behavior							
Sept.	.4	.4	.4	.3	.3	.4	.4
Nov.	.2	.3	.3	.3	.2	.4	.3
Feb.	.2	.2	.3	.3	.2	.3	.2
Gets Along With Classmates							
Sept.	3.2	3.0	2.8	3.2	3.5	3.0	3.0
Nov.	3.5	3.5	3.0	2.8	3.0	3.0	3.0
Feb.	3.5	3.2	3.0	2.8	3.2	3.0	3.0
Gets Along With Teachers							
Sept.	3.2	3.0	2.8	3.2	3.5	3.5	3.2
Nov.	3.5	3.2	3.0	3.0	3.0	3.2	3.2
Feb.	3.8	3.2	3.2	2.5	2.8	2.8	3.0

[1]Number of students receiving at least one set of classroom ratings.

individual teacher median retest correlations between the various pairs of scale administrations for the five scales ranged from the .40's to the low .60's. Combining teachers on each of the five scales, the November-February test-retest correlations were .60 for the class preparation ratings, .58 for the class contribution ratings, .52 for the disruptive behavior ratings, .59 for the gets along with classmates ratings, and .58 for the gets along with teachers ratings.

Examination of the individual student test-retest changes in the average ratings they received from their four classroom teachers revealed that from one to two-thirds of the students received identical average ratings upon retests on the five different rating scales. Only occasionally did a student's average rating change as much as a full scale value. In the absence of systematic test-retest changes and to support both data reduction and increased score stability for further statistical analyses, all the classroom teacher ratings were "triple-lengthed" by summing the three sets (September, November, and December).

6. Teacher - Unit Leader Interviews. Unlike the teacher ratings, which were confined to specific weeks of in-class behaviors, the interviews with the three eighth grade home room teachers in each school and with their unit leaders, who served as eighth grade coordinators and administrative assistants, were relatively unstructured, encouraging broader identifications and descriptions of problem and non-problem students. These interviews were conducted in February the week following the third set of teacher ratings and involved from one to one and a half hours of each teacher's and unit leader's time.

In conducting these interviews, the project representative met separately with each teacher, explaining that we had collected ratings from the teacher but now wanted to fill out the data with specific behavior descriptions so that we could interpret their ratings better. Each homeroom teacher was given a copy of his class roster and asked to read through the names and discuss any student who was having or causing trouble--"What kind of a kid is he? What does he do, exactly, that causes trouble to himself or others? What do the other kids think of him?" All six teachers appeared pleased to cooperate and expressed approval of this procedure, saying they felt the "straight rating data" would not give us a very good picture of the students' behavior.

The interviewer took notes as statements were made. Most teachers went straight through their lists and discussed almost all of their class members including their more competent students. A few of the students who evidently were not problems or were not remarkable in any way were not mentioned. The interview with the unit leader in each school followed a similar procedure but asked for comments on all problem students in the 8th grade.

Teacher and unit leader statements overlapped considerably, particularly with respect to the more prominent behavior problem students. Though a number of remarks were made with respect to socialization, school work, home conditions, health and appearance, by far the bulk of the statements referred to behavior problems, such descriptions as: "Very impatient with and disregards teacher's directions...will pull something off and get other kids blamed for it...nasty-mouthed, dirty, obnoxious--tries to shock and irritate...makes accusations and fights with other girls...pushy and smarty--trouble in hallways, not in class... severe attendance problem...can be annoying because wants recognition so badly...knocked down unit leader and kicked him."

From notes made during these interviews, students were categorized under one of seven headings:

(1) "hard-core" behavior problems (delinquent, vicious, extremely disruptive, etc.)
(2) "fairly serious" problems
(3) "moderately serious" problems
(4) "less serious" problems
(5) "minor" problems
(6) "no negative comments"
(7) "noticeably competent".

These seven categories approach a continuum of behavior problem severity and provided a pivotal variable for contrasting groups for the initial bivariate analyses of the several other student measures.

7. School Record Data. Student files were made available to the project staff for the purpose of providing academic and personal background information regarding the six classes of eighth graders being tested. These files were examined during the fall term and a project file for each student containing the student's age, number of siblings, number of months in present school, previous and present terms' attendance record, medical record, recorded IQ, verbal, numeric, and total scores on the School and College Achievement Test (SCAT), Metropolitan Advanced Reading Test score, and those teacher comments made about him by previous teachers was set up.

Parent occupation was not included because of its doubtful current validity. The medical record data identifying only six students having serious health problems and only another three having even minor medical problems was also deleted from further analysis. These students were distributed evenly between the more serious and less serious behavior problem students as identified by their home room teachers and unit leaders.

Current attendance was computed for the first four months of the 1971-72 school year (73 school days) as a percentage of enrolled days to equate for students beginning school a week or so late. Current teacher comments were also obtained for the six classes of students

but were deleted from the analysis. These statements added to the student's school record at the end of the school year (principally by homeroom teachers) proved to be too general, non-discriminating, and incomplete to recommend their inclusion.

Attendance records were available for primary grades, intermediate grades, and for the seventh grade. These were recorded as absences and were coded either less than 10 days, 10 to 19 days, 20 to 29 days, or more than 29 days. The SCAT and reading scores were in a standard score form with a mean of 50 and standard deviation of 10 based on the distribution of all similar grade Portland students.

The previous teacher "comments" were grouped as "schoolwork", "social adjustment", or "behavior problems"; and then coded into one of four categories. The "schoolwork" codes were, very poor (1), poor (2), satisfactory (3) and excellent (4). The "social adjustment" codes were, poor (1), fairly good (2), satisfactory (3), and very good, (4). The "behavior problems" codes were, no negative remarks (1), minor problems (2), fairly serious behavior problems (3), and serious behavior problems (4).

C. Data Analyses

1. High-Low Behavior Problem Comparisons. The foregoing subsection described the experimental measures developed from repeated tests, repeated ratings by classroom teachers, interviews with homeroom teachers and unit leaders, and school record data. As has been noted, because of the lack of apparent differences between the first and retest scores and to increase score stability, all repeated measures were combined into single composite scores. After these combinations and the deletions noted above the resultant 47 variables were retained for further analyses.

Three analyses were made of the retained variables, a series of single-variable examinations of score differences between "high" and "low" behavior problem students, an exploration of canonical relationships among selected subgroups of variables, and a principal factor analysis of 37 variables. Though computationally interrelated, these three analyses each probed the question of definition and measurement of social incompetency of junior high school age adolescents somewhat differently.

The first analyses focused on the teacher and unit leader interview-based descriptions. As noted in preceding subsection B5, these descriptions had been coded according to severity of behavior problems, permitting student classifications along a seven-point continuum from "noticeably competent" to "serious behavior problems". The seven catagories divided the 158 still-enrolled Portland eighth graders into groupings of 7 students classified as "noticeably competent", 19 students as "no comments", 43 as "minor problems", 24 as "less serious" problems, 27 "moderately serious" problems, 19 "fairly serious" problems, and 9 as "hard-core" behavior problems. Combining the first three categories as a single low behavior problem grouping and the last three categories as a single high behavior problem grouping resulted in 69 students coded "low", 55

students coded high, leaving 24 students in an inbetween "middle" category. Excluding these "middle" students, comparisons were made of the low and high students with respect to their score distributions and means on all 45 retained variables.

In essence, the question being asked by these comparisons was, "Are students currently identified by their teachers and unit leaders according to their reports of behavior problems differentiable with respect to the retained variables?" In terms of the project focus on social competency, these comparisons are, in effect, using the teacher and unit leaders as arbiters and "accepting" their principal concern with apparent behavior problems. Though a limited and therefore challengeable consideration of social competence, this focus is a direct reply to the demands of the public school setting. What do the negatively identified students look like on the measures at hand?

Tables 4.8 through 4.12 present the frequency distributions and means for the 45 retained variables for the sub-samples of low and high behavior problem students. t ratios computed for the mean differences between the low and high groups are reported in the middle columns of these tables. The variables are grouped under five headings, Table 4.8 containing the demographic or personally descriptive variables, Table 4.9, the more directly academic variables including teacher descriptions focusing on schoolwork, Table 4.10, the self-description variables, Table 4.11, the social relations variables including teacher descriptions of the student's relations with his peers and with teachers, and Table 4.12, the social awareness variables, partly intellective and partly social. These groupings are for the purpose of presentation and discussion and do not imply an a priori "factoring" of social incompetency dimensions.

The personally descriptive variables listed in Table 4.8 are age in months (Var. 90); sex (Var. 2); race (Var. 80); number of siblings (Var 91); months since entering present elementary school (Var. 92); absences in the primary grades (Var 93); in intermediate grades (Var. 94); in seventh grade (Var. 95); and eighth grade absences (Var. 113). The latter is reported as a percent of enrolled days during the first half of the 1971-1972 term in categories roughly equivalent to those used for the earlier attendance data.

As may be seen from Table 4.8 means and frequency distributions, excepting only the more recent absences, the high and low behavior problem student groups are relatively similar with respect to the several personal descriptors. Both student groups were almost identical with respect to age, 13.6 and 13.5 years; race distribution, each with 81 percent black; number of siblings (means of 2.6 and 2.7 for the high and low groups, respectively); number of months enrolled in their elementary school; and earlier school absence records.

Table 4.8

Means, Sigmas, t's, and Frequency Distributions for Personally Descriptive Variables for High and Low Behavior Problem Portland Students as Defined by Teacher - Unit Leader Interviews

Variable	N	Mean	σ	t	Frequencies			
90 - CA					<162	162-167	168-173	>173
High	47	163.6	5.5	1.25	19	18	6	4
Low	67	162.2	5.4		39	18	7	3
2 - Sex					Males	Females		
High	55				26	29		
Low	69				30	39		
89 - Race					Black	White	Other	
High	55				45	6	4	
Low	69				56	11	2	
91 - Siblings					<2	2	3	4	>4
High	39	2.6	1.6	<1.0	9	13	9	3	5
Low	47	2.7	1.6		11	16	6	7	7
92 - Time[1] Enrolled					1-2 mos.	3-6 mos.	7-16 mos.	>16 mos.	
High	46	3.4	1.0	<1.0	6	1	7	32	
Low	68	3.3	1.1		10	3	10	45	
93 - Days[1] Abs., Prim.					0-9	10-19	20-29	>29	
High	49	2.4	1.0	<1.0	9	15	10	7	
Low	41	2.2	1.0		13	21	7	8	
94 - Days[1] Abs., Int.									
High	44	2.3	1.0	<1.0	11	15	12	6	
Low	57	2.1	.9		15	24	13	5	
95 - Days[1] Abs., 7th									
High	43	2.3	1.2	2.67**	16	11	4	12	
Low	61	1.7	.9		30	22	5	4	
113 - % of Time Abs., 8th					0-4%	5-11%	12-16%	>16%	
High	55	11.7	10.4	3.53**	18	16	5	16	
Low	69	6.4	6.3		37	21	8	3	

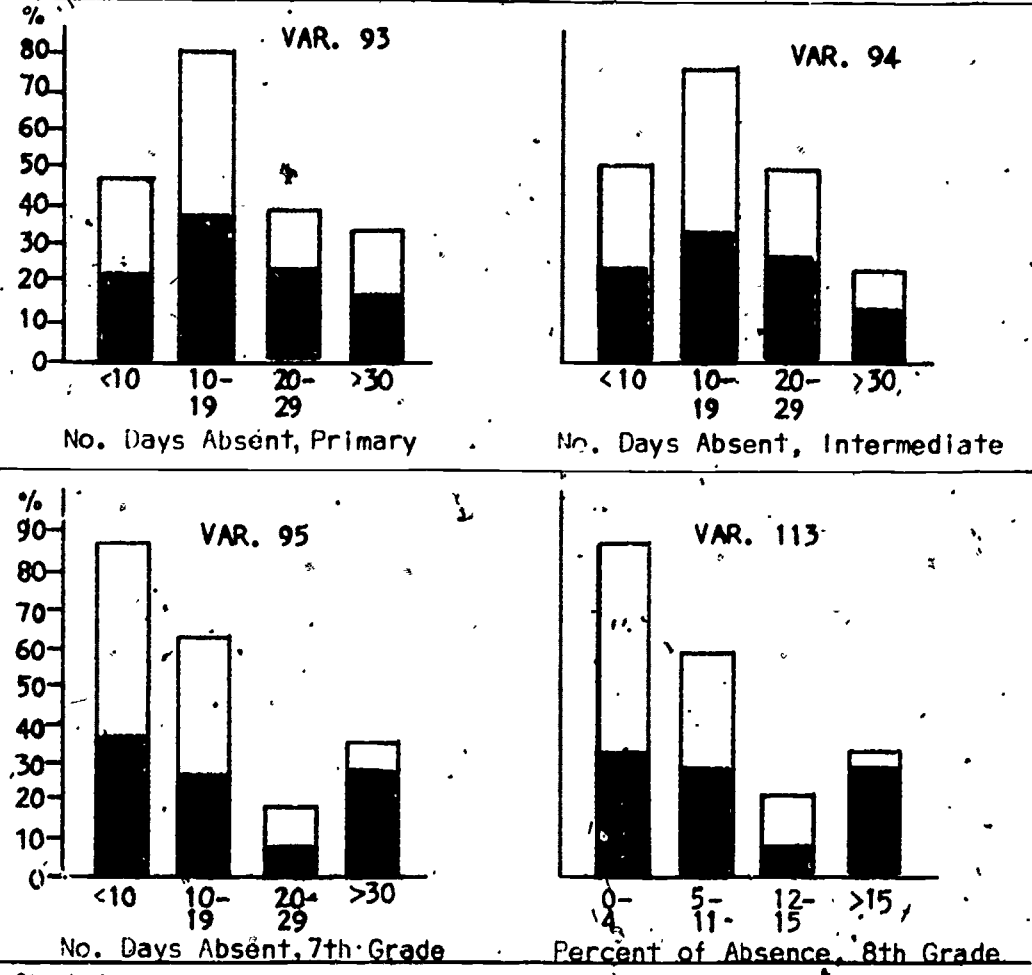
*Significant at the .05 level of confidence; **significant at the .01 level.

[1]Means and sigmas based on values of 1, 2, 3, and 4 for categorized data.

Only with respect to the more recent absences did a difference between the two groups appear. Figure 4.1 presents the Table 4.8 attendance data as percentages of students with differing absences for the four school periods. The shaded portion of each Figure 4.1 bar represents the proportion or percentage of high behavioral problem students and the unshaded portion, low behavioral problem students having a given number of absences. The categories for the half-year absences for the eighth graders are proportionately equivalent to those based on the full school year. The total of the heights of the bars is 200 percent, since the shaded and unshaded areas represent proportional frequencies of their particular sample (high or low BP) within each interval.

Figure 4.1

Relative Frequencies of School Absences for High and Low Behavior Problem 8th Graders



Note: Shaded areas represent proportions of high behavior problem students in each score category. Unshaded areas represent proportions of low behavior problem students in each score category.

[1] This is also true of Figures 4.2 through 4.6.

Considering the four sets of graphs together, an interesting pattern of changing percentages of high absences is to be noted. The approximately matched absence records for the low behavior problem and the high behavior problem students in the earlier grades clearly change over the school years, with the proportion of low BP students having excessive absences reducing 16 to 9 to 7 to 4 percent and the proportion of high BP students increasing from 17 and 14 percent in the earlier grades to 28 and 29, respectively, in the upper elementary grades. Though these figures do not reveal whether or not the same students contributing to the 17 percent for the earlier grades continued their high rate of absences into the eighth grade, the fact that a near third of the more prominent behavior problem students are absent an average of one or more days a week accentuates a serious and established school delinquency problem.

The academically oriented variables comprising the Table 4.9 data are recorded IQ's (Var. 101); the verbal (Var. 97), quantitative (Var. 98), and total (Var. 99) SCAT scores; the Metropolitan Reading score (Var. 100); the teacher comments from student files regarding schoolwork (Var. 103); and the classroom teacher ratings regarding class contribution and preparation (Var. 300). As may be noted, both the IQ's (combined sample mean of 89.3) and the SCAT and reading scores (combined sample means in the low 40's as contrasted with the total Portland schools eighth grade mean of 50) suggest a generally below average scholastic achievement of the students tested.

Neither the IQ nor the SCAT nor reading test scores differentiated between the high and low behavior problem groups. Not only were the high and low group means very similar but the frequency distributions for these five measures (drawn in Figure 4.2) were also quite alike. An exception is the quantitative SCAT score distribution with a very narrow range of scores for the low BP students.

Both earlier teacher comments regarding school work and the teacher classwork ratings, however, differentiated the high and low groups. Using the category codes 1, 2, 3, and 4 for the teacher comment variable yielded means of 2.5 and 2.7 for the BP and low BP students and a t of 3.63 significant at the .01 level. Similarly, the teacher ratings means for the BP and low BP groups were 2.7 and 1.9, respectively, and a t of 5.24 significant at the .01 level.

Though both teacher description variables provided significant mean differences, reference to their relative frequency distributions in Figure 4.2 reveals one clearly superior in discriminating between high BP and low BP students. The teacher comment variable affords at best a moderate separation, with only 44 percent of the high BP students described as less than satisfactory in their school work (as contrasted with 29 percent of low BP students). The teacher classwork rating separations are considerably more distinct, with nearly half the high BP's receiving ratings averaging below adequate, as contrasted with just under a fifth of the low BP's; and over a third of the low BP's receiving ratings averaging near the most favorable rating, "good", as contrasted with only 4 high BP students (1 in 14).

Table 4.9

Means, Sigmas, t's, and Frequency Distributions for Academic Variables for High and Low Behavior Problem Portland Students as Defined by Teacher - Unit Leader Interviews

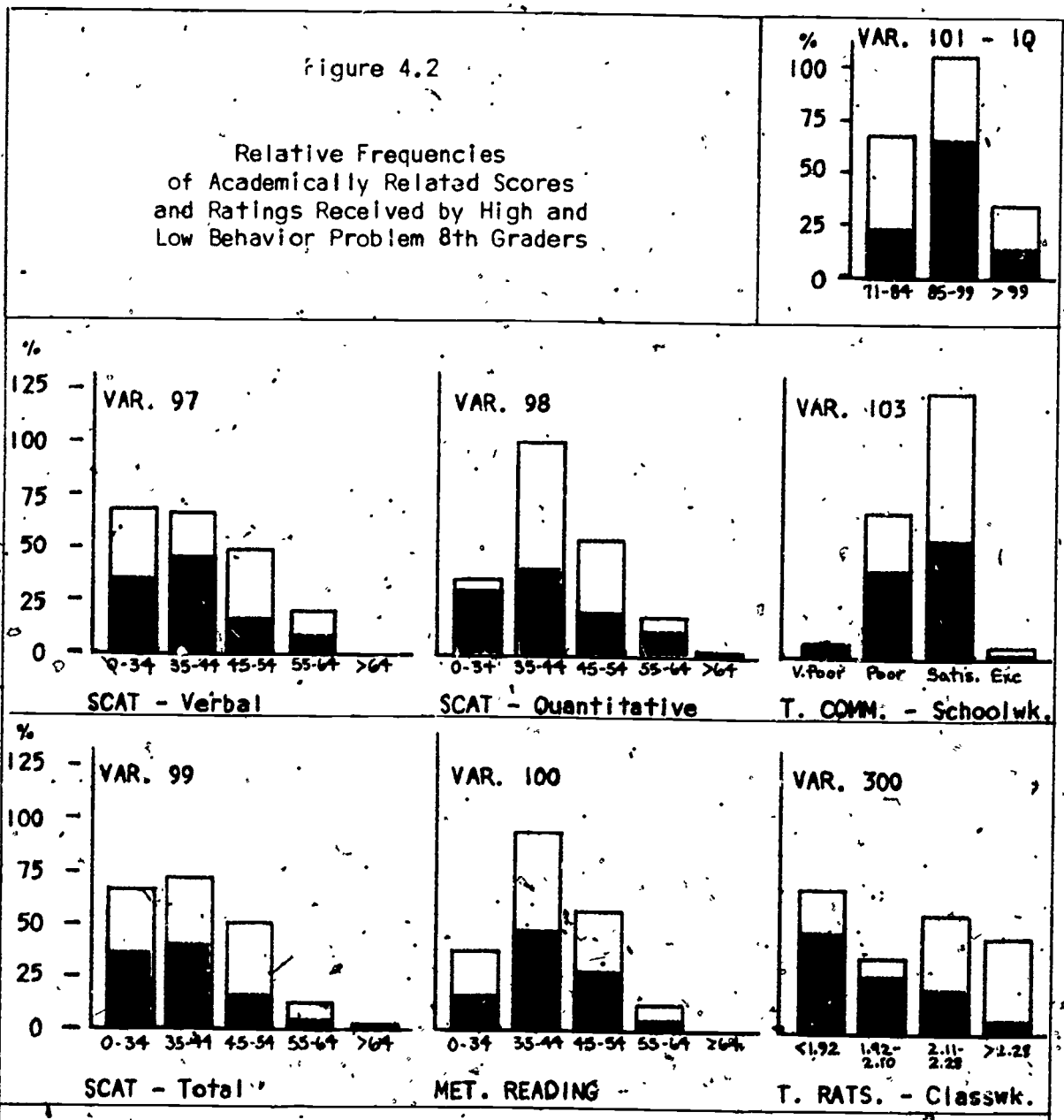
Variable	N	Mean	σ	t	Frequencies				
101 - IQ					71-84	85-99	>99		
High	23	89.5	10.5	<1.0	5	15	3		
Low	16	89.0	11.4		7	6	3		
97 - SCAT Verbal					<35	35-44	45-54	55-64	>64
High	41	38.4	9.4	1.47	14	18	6	3	0
Low	53	41.4	9.8		18	12	18	5	0
98 - SCAT Quant.									
High	41	41.2	11.2	<1.0	12	16	8	4	1
Low	53	42.9	6.8		2	31	17	3	0
99 - SCAT Total									
High	42	39.1	9.3	1.27	15	17	7	2	1
Low	55	41.6	9.2		16	17	18	4	0
100 - Met. Reading									
High	38	41.5	7.7	<1.0	7	18	11	2	0
Low	55	41.5	9.3		11	25	15	4	0
103 - Teacher Comments[1] Schoolwork					Very Poor	Poor	Satis.	Exc.	
High	45	2.5	.6	1.72*	2	18	24	1	
Low	58	2.7	.5		0	17	40	1	
300 - Teacher Ratings[1] Classwork					<1.92	1.92-2.10	2.11-2.28	>2.28	
High	55	1.9	.3	5.62**	26	14	11	4	
Low	69	2.2	.4		13	6	25	25	

*Significant at the .05 level of confidence; **significant at the .01 level.

[1]Means and sigmas based on values 1, 2, 3, and 4 for categorical data.

Figure 4.2

Relative Frequencies of Academically Related Scores and Ratings Received by High and Low Behavior Problem 8th Graders



Note: Shaded areas represent proportions of high behavior problem students, unshaded areas low behavior problem students.

Among the reasons for the superior discrimination of the ratings might be the differences in data format (one derived from written file comments and the second from spaced sets of daily ratings) and particularly the currency of the rating data with respect to the interview-based high-low categorization. However, data is not available to conclude that either reason takes precedence.

Table 4.10

Means, Sigmas, t's and Frequency Distributions for Self Description Variables for High and Low Behavior Problem Portland Students as Defined by Teacher - Unit Leader Interviews

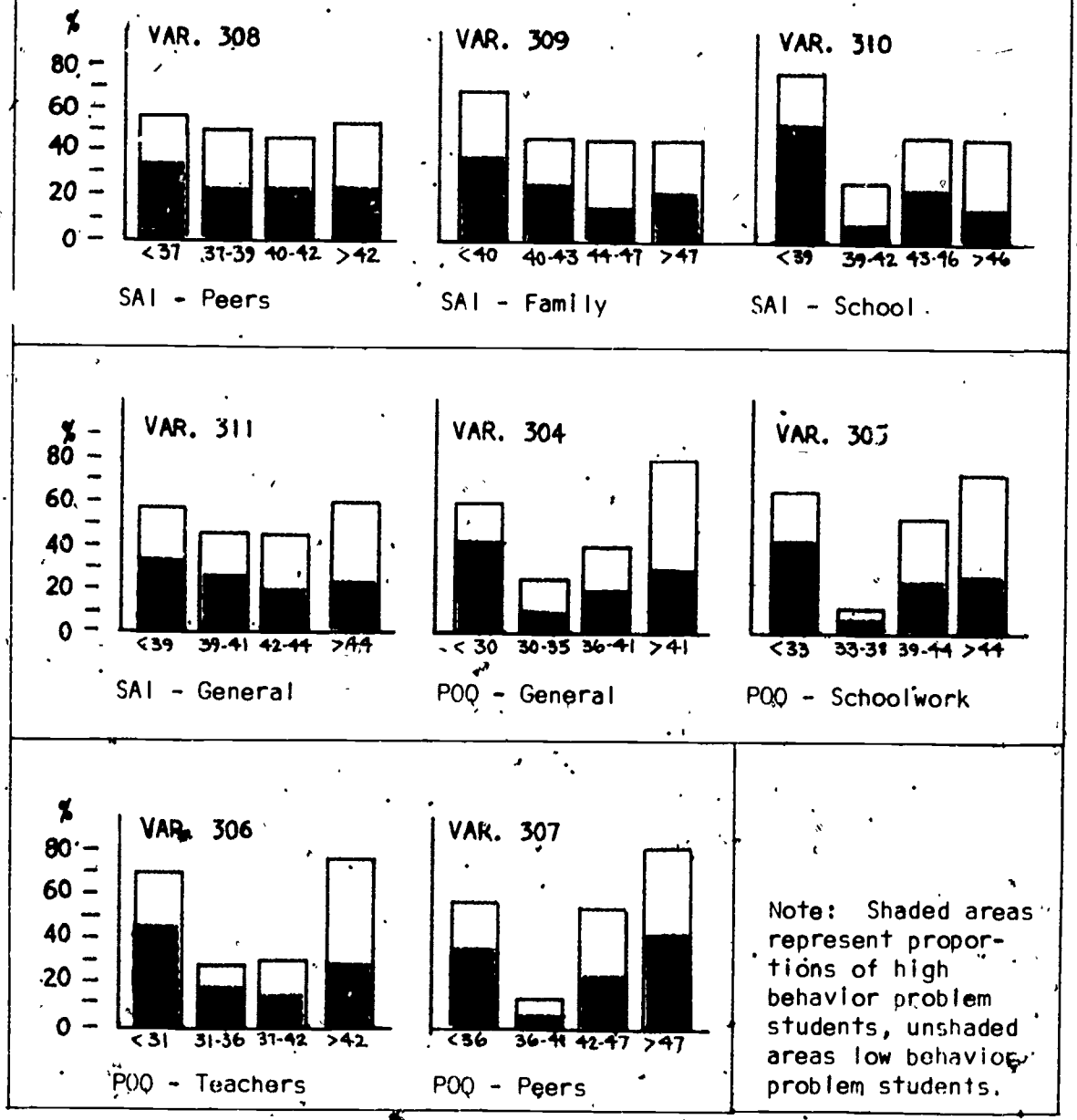
Variable	N	Mean	σ	t	Frequencies			
308 - SAI Peers					<37	37-39	40-42	>42
High	48	38.9	6.7	<1.0	15	11	11	11
Low	66	39.5	6.0		16	17	14	19
309 - SAI Family					<40	40-43	44-47	>47
High	48	41.8	7.2	<1.0	18	12	7	11
Low	66	42.5	5.9		19	14	19	14
310 - SAI School					<39	39-42	43-46	>46
High	48	38.8	8.5	3.13**	26	4	11	7
Low	66	43.0	5.8		16	12	16	22
311 - SAI General					<39	39-41	42-44	>44
High	48	40.5	5.4	1.34	16	12	9	11
Low	66	41.8	5.3		15	12	16	23
304 - POQ General					<30	30-35	36-41	>41
High	51	32.7	12.3	2.88**	21	5	10	15
Low	66	39.2	11.6		12	9	13	32
305 - POQ Schoolwork					<33	33-38	39-44	>44
High	51	35.4	11.9	2.93**	22	4	12	13
Low	66	41.7	11.1		14	3	19	30
306 - POQ Teachers					<31	31-36	37-42	>42
High	51	33.8	13.3	2.60**	23	8	6	14
Low	66	39.9	11.8		16	7	12	31
307 - POQ Peers					<36	36-41	42-47	>47
High	51	39.1	12.1	1.86*	18	3	11	19
Low	66	43.0	10.4		13	4	20	29

*Significant at the .05 level of confidence; **significant at the .01 level.

The self-description variables in Table 4.10 include the four subscores from both self-appraisal inventory (SAI) (Var. 308-311) and the pupil opinion questionnaire (POQ) (Var. 304-307). As may be noted from the table data, the low BP students typically scored higher on all these eight measures, though differences between group means failed to reach significance (at the .05 level) for the peers, family, and general self-appraisal subtests. The generally similar proportions of high BP and low BP students in the various scoring intervals of these four least school-related subtests (see Figure 4.3) reveals this non-differentiating pattern over the full test score ranges.

Figure 4.3

Relative Frequencies of Student Appraisal Inventory and Pupil Opinion Questionnaire Subtest Scores for High and Low Behavior Problem 8th Graders



Note: Shaded areas represent proportions of high behavior problem students, unshaded areas low behavior problem students.

Though yielding significant mean differences (at the .05 level), the POQ peer subtest afforded the weakest high-low BP separations, these operating only for low scores. For the three POQ subtests focusing on school in general, schoolwork, and teachers, and for the single SAI subtest dealing with self-concept as a student, much more substantial score differences were found; all four mean differences were significant at the .01 level.

The extent of these differences is revealed in the Figure 4.3 bar graphs. Proportions of high BP and low BP students for these four subtests are generally similar within the middle score intervals but reverse strikingly at either extreme. Over 40 percent of the high BP students score toward the negative end of these attitude and self-appraisal subscales and generally less than half as many low BP's. Conversely, high scores indicating positive attitudes toward school, schoolwork, and teachers and towards oneself as a student were earned by generally twice as many low BP's as high BP's, though this difference is least strong for the attitudes toward teachers subscale.

The 17 social relations measures in Table 4.11 represent the largest block of experimental variables. Five of these are teacher descriptions, two based on former teachers' comments concerning the students' social adjustment and behavior problems (Var. 104, 105) and three on current classroom teacher ratings made during three widely-spaced weekly periods (Var. 301-303). For all five teacher description variables, appreciable differences were found between the high BP and low BP student groups both in terms of significant mean differences (at the .01 level) and in terms of frequency distributions.

The extent of these differences is evident by comparing the shaded (high BP) and non-shaded (low BP) bar graphs drawn in Figure 4.4. For example, it may be noted that former teacher comments in student files regarding social adjustment (Var. 104) indicated "satisfactory" or better for 90 percent of the low BP students as contrasted to 39 percent of the high BP students. At the negative end of the scale, the reverse was true, only two low BP students (4 percent) as contrasted with 42 percent of the high BP's were described as having "poor" social adjustment. High BP students similarly received a disproportionately high percentage of negative comments regarding their behavior (Var. 105), with only one low BP eighth grader receiving more than a minor problem comment in his earlier school records as contrasted with 30 percent of the high BP students.

These disproportionalities at both ends of the scales, i.e., a much greater percentage of high BP's described negatively and a much greater precentage of low BP's described positively, clearly extends to the frequency distributions for current classroom teacher ratings of disruptive behavior (Var. 301) and of how well the student gets along with those teachers (Var. 302) and how well he gets along with his classmates (Var. 303). The similarities in frequency distributions

Table 4.11

Means, Sigmas, t's, and Frequency Distributions for Social Relations Variables for High and Low Behavior Problem Portland Students, as Defined by Teacher - Unit Leader Interviews

Variable	N	Mean	σ	t	Frequencies			
104 - Teacher Comment Soc. Adjust.					Poor	Good	Satis.	V. Good
High	36	1.97	.91	6.14**	15	7	14	0
Low	55	2.89	.50		2	4	47	2
105 - Teacher Comment Beh. Problems					No Neg. Remarks	Minor Probs.	F. Ser. Probs.	Ser. Probs.
High	47	2.17	.92	5.84**	11	22	9	5
Low	57	1.33	.51		39	17	1	0
301 - Teacher Ratings Dis. Behavior					≤.51	.51-.88	.89-1.27	>1.27
High	55	.23	.13	6.68**	10	6	9	30
Low	69	.09	.09		40	13	6	10
302 - Teacher Ratings Get Along w Teacher					≤2.9	2.9-3.1	3.2-3.3	>3.3
High	55	2.91	.48	5.20**	28	9	9	9
Low	69	3.36	.47		9	10	12	38
303 - Teacher Ratings Get Along w Classmates								
High	55	2.81	.59	5.02**	26	10	10	9
Low	69	3.27	.42		9	10	19	31
313 - Mean Ratings Made of Same Sex Peers					≤1.55	1.55-2.50	2.55-3.50	>3.50
High	51	2.87	.58	1.14	0	13	30	8
Low	69	2.99	.55		0	15	39	15
314 - Mean Ratings Made of Opp. Sex Peers								
High	51	2.42	.76	1.24	6	22	21	2
Low	66	2.23	.86		16	19	28	3
315 - Mean Ratings Made of Recalled Peers								
High	45	3.45	.71	<1.0	1	2	18	24
Low	65	3.50	.51		0	5	20	40

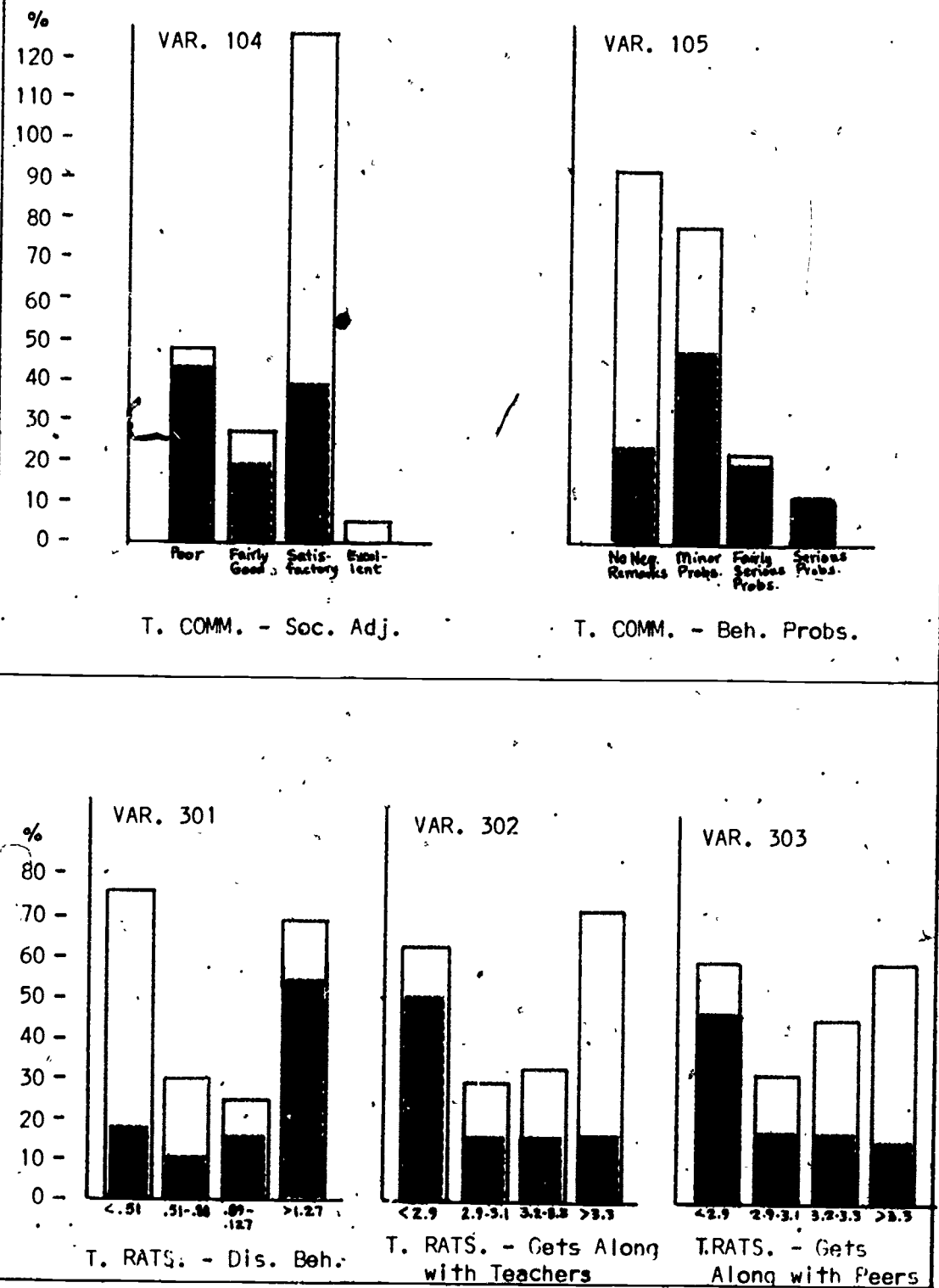
(continued)

Table 4.11 (Continued)

Variable	N	Mean	σ	t	Frequencies <1.55	1.55-2.50	2.55-3.50	>3.50
316 - Mean Ratings Made of School Adults								
High	50	2.69	.91	1.18	5	13	22	10
Low	69	2.87	.74		5	15	33	16
317 - Mean Ratings Made of Recalled Adults								
High	26	3.54	.52	<1.0	0	1	8	17
Low	59	3.56	.58		0	3	17	39
323 - Mean Estimates Made of Ratings from Same Sex Peers								
High	49	2.95	.59	<1.0	1	9	27	12
Low	67	2.93	.59		0	14	32	21
324 - Mean Estimates Made of Ratings from Opp. Sex Peers								
High	49	2.50	.86	<1.0	5	20	17	7
Low	64	2.40	.96		14	14	29	7
325 - Mean Estimates Made of Ratings from Recalled Peers								
High	43	3.50	.41	<1.0	0	0	19	24
Low	63	3.51	.45		0	3	22	38
326 - Mean Estimates Made of Ratings from School Adults								
High	48	2.82	.79	1.75*	4	9	27	8
Low	64	3.07	.70		3	9	30	22
327 - Mean Estimates Made of Ratings from Recalled Adults								
High	26	3.71	.30	<1.0	0	0	6	20
Low	54	3.66	.41		0	1	12	41
318 - Mean Ratings Received by Same Sex Peers								
High	55	2.72	.55	2.26*	3	12	38	2
Low	69	2.94	.52		1	14	38	16
319 - Mean Ratings Received by Opp. Sex Peers								
High	55	2.34	.52	<1.0	3	29	23	0
Low	69	2.39	.52		6	26	37	0

*Significant at the .05 level of confidence; **significant at the .01 level.

Figure 4.4
Relative Frequencies of Descriptions of Social Relations of High and Low Behavior Problem 8th Graders



Note: Shaded areas represent proportions of high behavior problem students, unshaded areas low behavior problem students.

for teacher comments concerning prior terms and current classroom teacher ratings suggest persisting social behavior problems for many BP students.[1]

The remaining 12 social relations variables are all derived from students' rating and estimating of various subgroups of peers and adults. The first five variables are averages of ratings made by the student of other eighth graders of his own sex (Var. 313); other eighth graders of the opposite sex (Var. 314); peers he added to his recall list (Var. 315); school adults (Var. 316); and adults he added to his recall list (Var. 317). Similarly, the next five variables are averages of estimated ratings which the student expected to receive from these same subgroups, same sex eighth graders (Var. 323), opposite sex eighth graders (Var. 324), recalled peers (Var. 325), school adults (Var. 326), and recalled adults (Var. 327). The last two social relations variables are averages of the ratings received by the student from other same sex eighth graders (Var. 318) and from other opposite sex eighth graders (Var. 319).

As may be noted from the Table 4.11 means and frequency distributions, differences in these social relations measures between the high BP and low BP groups were generally negligible. Only for their expected ratings from school adults and for their ratings received from same sex eighth graders were the differences significant (.05 level). This general lack of differences between the high behavior problem and low behavior problem students' ratings made of others and expected from others is revealed in the similarity of relative frequency distributions presented in Figure 4.5. Even the two measures with significantly different means do not afford much high-low BP discrimination, the differences apparently being principally high ratings expected from school adults by more low BP's (34 percent) than by high BP's (17 percent) and more low BP's receiving high ratings from same sex eighth graders (23 percent) than high BP's (4 percent).

Most generally for both the BP's and non BP's, (1) their average expected ratings mirrored the ratings they made of others, (2) few students made as high ratings of opposite sex eighth graders as of same sex eighth graders, (3) both peer and adult recalled persons were especially well rated (students predominantly adding names of persons they got along with especially well), and (4) very few students indicated that they typically do not get along well with most of the same sex eighth graders in their school or for that matter with most school adults. Judging from the somewhat preferential ratings received by the low BP students, both from their same sex peers (Var.318)

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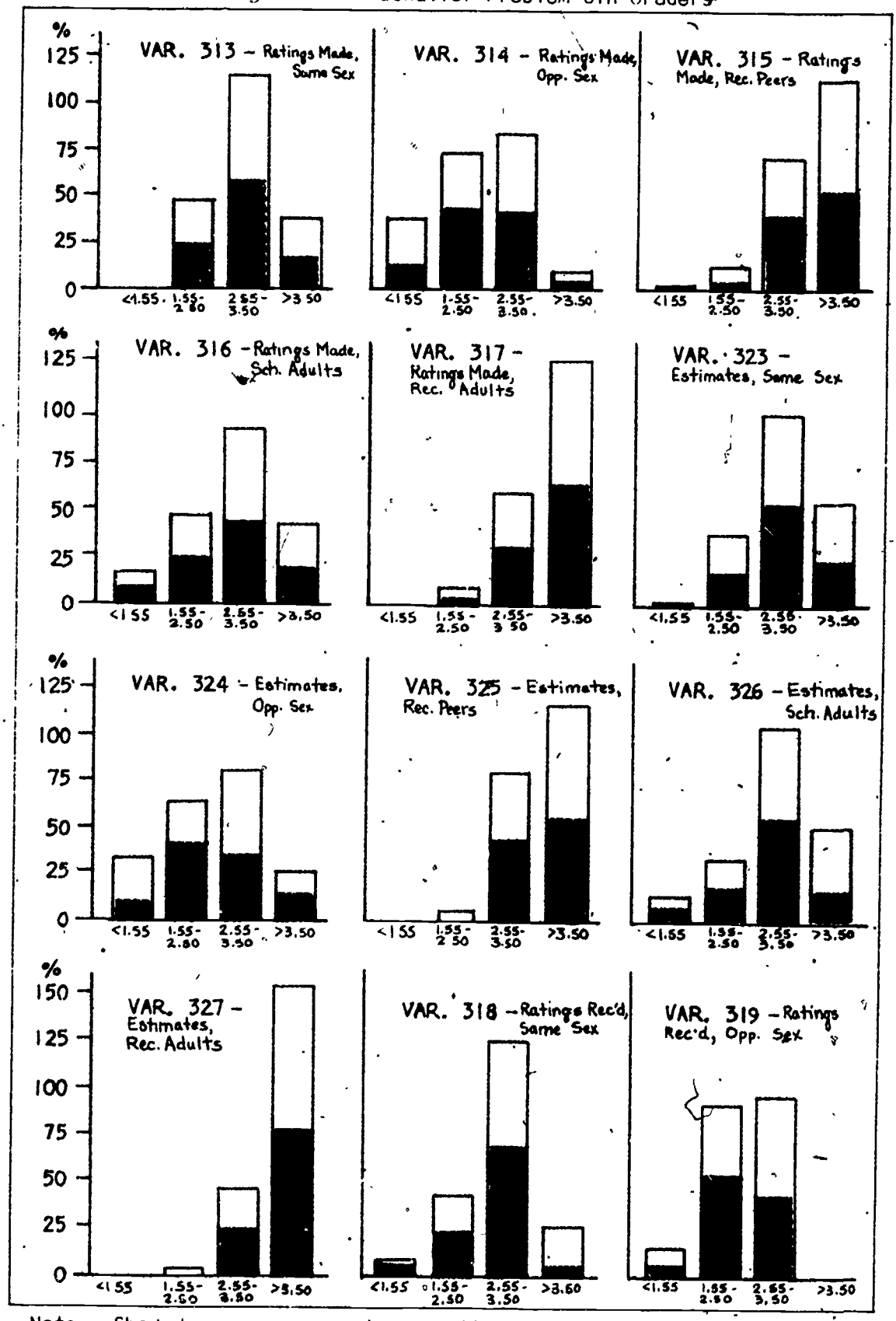
[1] Though it will be noted in further summarizing these several high-low BP comparisons, it perhaps should be emphasized sooner that this repeated identification is far from complete. A good half of the students, although identified as behavior problem eighth graders, received non-negative descriptions and are therefore undifferentiable from similarly described low BP students.

Figure 4.5

Relative Frequencies of Social Relations Rating and Estimating Measures for High and Low Behavior Problem 8th Graders



Note: Shaded areas, represent proportions of high behavior problem students, unshaded areas low behavior problem students.

and from their teachers (Var. 302; see Figure 4.4) these expectations are probably more realistic for the low problem group than for the high.

The last set of experimental variables is presented in Table 4.12. These include measures of the awareness or accuracy of the student's estimates or ratings he is receiving from same sex eighth graders (Var. 320), from opposite sex eighth graders (Var. 321), and from his classroom teachers (Var. 322). In addition, Table 4.12 includes the score from the Picture Interpretation Test (PIT) as a further, non rating based social awareness measure.

As may be noted from the Table 4.12 means and frequencies, excepting the mean accuracy scores for estimating the ratings they would receive from opposite sex eighth graders (which were typically least accurately estimated), differences between the high BP and low BP students on the other three accuracy measures were significant at the .05 level.

Table 4.12

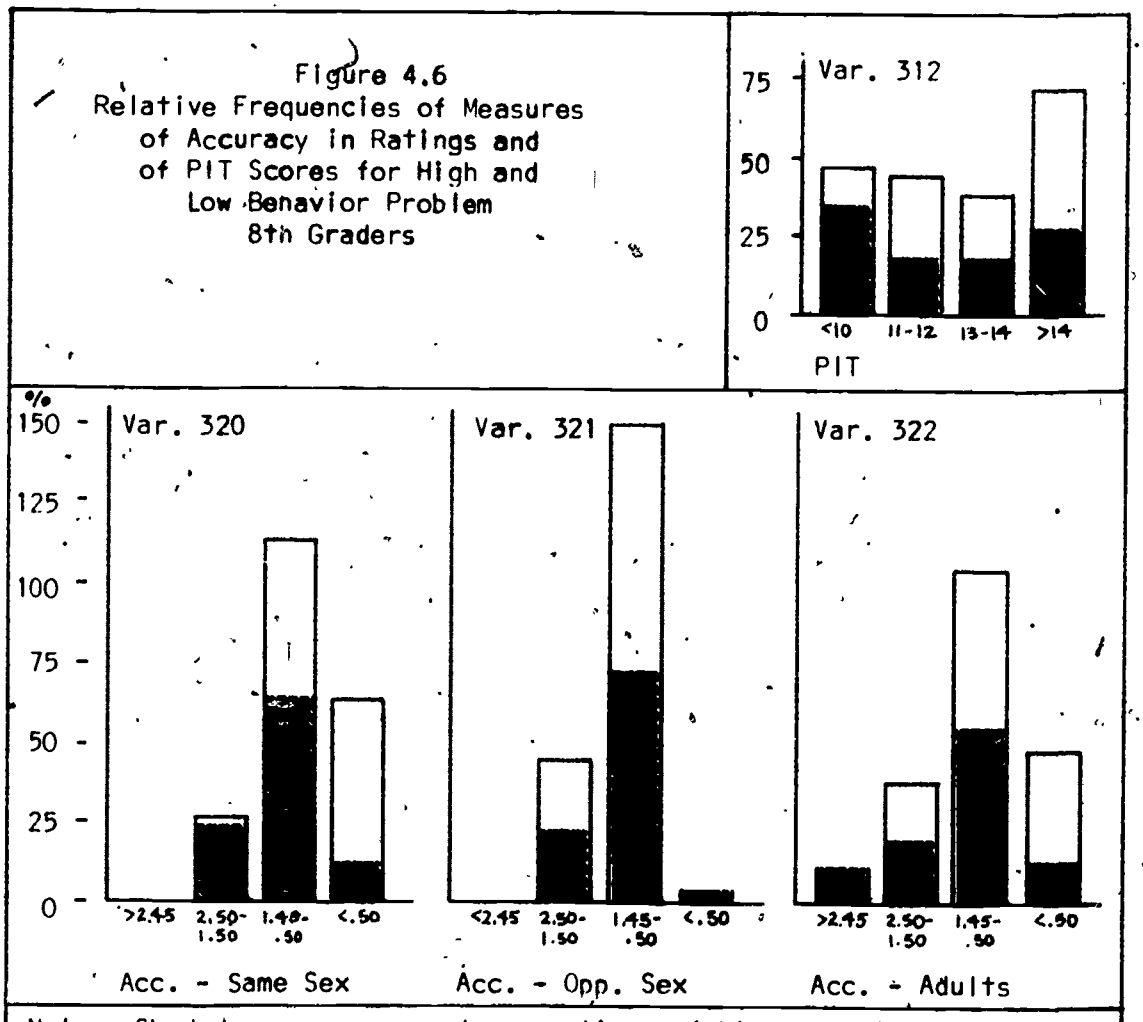
Means, Sigmas, t's, and Frequency Distributions for Social Awareness Variables for High and Low Behavior Problem Portland Students as Defined by Teacher - Unit Leader Interviews

Variable	N	Mean	σ	t	Frequencies			
320 - Accuracy in Estimating Same Sex Peer Ratings					<1.55	1.55-2.50	2.55-3.50	>3.50
High	48	1.00	.27	2.79**	0	11	31	6
Low	67	.85	.29		0	1	32	34
321 - Accuracy in Estimating Opp. Sex Peer Ratings								
High	49	1.20	.36	<1.0	0	11	36	2
Low	62	1.20	.32		0	14	48	0
322 - Accuracy in Estimating School Adults Ratings								
High	45	1.29	.86	3.68**	5	9	25	6
Low	65	.78	.58		0	11	31	23
312 - PIT					10	11-12	13-14	14
High	52	11.4	3.3	2.39**	14	10	10	18
Low	66	12.8	3.0		29	13	16	8

**Significant at the .01 level.

These differences are further described in the Figure 4.6 histograms where by far the greater proportion of low error scores are earned by low BP students and higher inaccuracy scores by greater proportions of high BP students.

Figure 4.6
Relative Frequencies of Measures of Accuracy in Ratings and of PIT Scores for High and Low Behavior Problem 8th Graders



Note: Shaded areas represent proportions of high behavior problem students, unshaded areas low behavior problem students.

[1] A constant artifactual danger in this type of difference score is that general estimating behavior (in this instance, predominantly high expected ratings) can result in persons appearing to be accurate by coincidentally rather than deliberately agreeing with a generally high rater. Consistent high-low BP differences obtained for the PIT error score suggest perhaps a more individualized than general accuracy score, i.e., that this danger is less applicable than theoretic in the present instance.

Whether or not this inaccuracy contributes to the student's behavior problems can only be conjectural at this writing. All that these and the foregoing obtained differences between high and low behavior problem students can indicate is the extent of these differences, not their effect. The following multivariate correlational analyses will further examine relatedness among these Portland student measures.

2. Canonical Correlational Analyses. Limitations of the foregoing high-low group comparisons are the single one-at-a-time consideration of a large number of variables, the exclusion of intervariable relationships, and the difficulty of summary. Examination of the matrix of intercorrelations of these 45 variables indicated general independence among all except subtest scores for the same test and therefore probably limited data reduction possibilities. However, the extent of the data reduction should not be concluded in advance of more through analysis.

Problems in the simultaneous consideration of multiple measurements for considering differences among individuals or groups of individuals has been succinctly described by Cooley (1971). In a simplified sense, the problem is one of reducing the number of dimensions needed for describing individual or group differences. The more recent availability of high speed computers has led to the development of a number of multivariate techniques affording solution to this problem. Cooley's review includes a summary of the logic and algebra of the two alternate multivariate analyses used with the current data. These analyses involved an examination of the canonical correlations between selected subsets of variables and an examination of the factor structure of the variables studied using a principal component procedure with varimax rotation.[1] Though certainly not independent of their solutions, together these two analyses permit a broader interpretation of the intervariable relationships among the several test score, rating, and background measures obtained for the Portland eighth grade sample.

In considering the matrix of intercorrelations among the large set of variables used in this study, a question of particular interest was that of extent of overlap between subsets of variables. The problem of maximizing the relationship between two subsets of variables is solved by the canonical correlation procedure which provides a simultaneous optimum weighting (in a least squares sense) of the variables within each of two subsets and the extraction of additional pairs of orthogonal linear functions until the "independent dimensions of informational overlap between the two subsets are exhausted" (Lohnes and Marshall, 1965). In particular, the question answered by the canonical R is how much of the variance of two linear composites is shared. This proportion of variance represented by the squared canonical R is not to be confused with the "shared variance of the two sets".

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[1]These analyses were supported by the instructive assistance of S. David Farr and the programming assistance of Dick A. Genardi.

Stewart and Love (1968) have outlined a canonical correlational analysis adapting informational theory concepts for dealing with canonical correlations. In their analysis they considered the terms similarity, redundancy, and correlation to be analogous. These writers recommend a non-symmetric measure of redundancy. Their analysis was generally followed in examining the relationship among pairs of each of seven subsets of two to five variables. These subsets of variates were each selected as forming somewhat intradependent measures. These were: (1) current teacher descriptions, including the interview-based rating of behavior problem severity used as the focal variable in the preceding single variable analyses (Var. 106, 300-303), (2) earlier teacher commentary in school records (Var. 103-105), (3) subtests on the SAI (Var. 308-311), (4) subtests on the POQ (var. 304-307), (5) student ratings of how well he gets along with others (Var. 313-317), (6) estimates of how others rated himself (Var. 323-327), and (7) ratings actually received from other eighth graders (Var. 318-319). A summary of the resulting canonical correlational analyses is presented in Table 4.13.

To reduce the length of Table 4.13, data rows for roots providing no further (zero) redundancy are not included. The first column entries are the canonical correlations, R, indicating the maximum linear relationship between the two sets of variables. Excepting only the set of student ratings of various groupings of other persons (school peers of same and opposite sex, recalled peers, school and recalled adults) paired with estimates these students made of these same ratee groups, which yielded an R of .90, these maximum coefficients typically only reached the .40's and .50's.

The second column, R^2, expresses the proportion of variance shared by the linear composites of the two sets of variables. For all the pairings of the seven sets of variables, excepting again the student ratings and estimates pairing, these percentages were generally low, typically only about 20 percent.

The third column reveals the percent of variance extracted by each succeeding canonical variate. It should be noted that the total proportion of extracted variance for the set containing the fewer variables always will sum to unity, since the analysis extracts as many factors as there are variables. For example, in the first canonical analysis of Table 4.13, 76 percent of the variance (.37 + .17 + .22) of the five teacher description variables comprising the left set was utilized in forming the three canonical variates, while 100 percent of the three teacher comments variables comprising the right set was utilized.

The redundancy columns contain perhaps the most meaningful summary data in the exploratory context of the present analysis. These entries reveal the percent of variance of the left set predicted by the variance of the right set (and the reverse for the right column entries). The percent column to the right of each redundancy column indicates the proportion of total redundancy accounted for by the first canonical variate, then the proportion accounted for by the second canonical variate and so forth. For example, the sum of the first left set of redundancy values is .19, indicating that given all three canonical variates, only 19 percent

Table 4.13

Summary of Canonical Correlation Analysis

R	R^2	Left Set: Var. Extr.	Left Set: Redundancy	Left Set: Prop. Tot. Redundancy	Right Set: Var. Extr.	Right Set: Redundancy	Right Set: Prop. Tot. Redundancy
		Current Teacher Des.			Teacher Comments		
.64	.40	.37	.15	.32	.54	.22	.85
.33	.11	.17	.02	.10	.23	.02	.09
.26	.07	.22	.02	.08	.23	.02	.06
		Current Teacher Des.			SAI		
.49	.24	.45	.11	.85	.40	.09	.82
.27	.07	.20	.01	.11	.15	.01	.10
.19	.04	.14	.00	.04	.25	.01	.08
		Current Teacher Des.			POQ		
.46	.21	.44	.09	.73	.78	.16	.91
.39	.15	.20	.03	.23	.10	.01	.08
		Current Teacher Des.			Mean Ratings Made		
.54	.29	.34	.10	.70	.15	.04	.45
.35	.12	.10	.01	.09	.29	.04	.37
.27	.08	.36	.03	.19	.19	.01	.14
		Current Teacher Des.			Mean Estimates Made		
.48	.23	.25	.06	.63	.16	.04	.54
.27	.07	.41	.03	.31	.30	.02	.31
.19	.04	.11	.00	.04	.22	.01	.12
		Teacher Comments			SAI		
.33	.11	.58	.06	.82	.29	.03	.72
.22	.05	.22	.01	.14	.14	.01	.16
		Teacher Comments			POQ		
.39	.15	.23	.04	.65	.21	.03	.58
.19	.04	.50	.02	.33	.60	.02	.42
		Teacher Comments			Mean Ratings Made		
.40	.16	.32	.05	.62	.20	.03	.84
.26	.07	.42	.03	.36	.08	.01	.16
		Teacher Comments			Mean Estimates Made		
.43	.18	.21	.04	.51	.16	.03	.69
.27	.07	.45	.03	.43	.18	.01	.31
		Teacher Comments			Mean Ratings Received		
.41	.17	.52	.09	.94	.73	.12	.96

(continued)

Table 4.13 (Continued)

R	R^2	Left Set: Var. Extr.	Left Set: Redundancy	Left Set: Prop. Tot. Redundancy	Right Set: Var. Extr.	Right Set: Redundancy	Right Set: Prop. Tot. Redundancy
		SAI			POQ		
.46	.21	.16	.04	.55	.09	.02	.22
.29	.08	.31	.03	.41	.79	.07	.79
		SAI			Mean Ratings Made		
.44	.19	.51	.10	.78	.31	.06	.71
.34	.12	.17	.02	.16	.12	.01	.17
.22	.05	.11	.01	.05	.15	.01	.08
		SAI			Mean Estimates Made		
.40	.16	.14	.07	.70	.26	.04	.60
.27	.08	.16	.01	.12	.18	.01	.18
.24	.06	.18	.01	.10	.13	.01	.11
.16	.03	.25	.01	.07	.26	.01	.10
		SAI			Mean Ratings Received		
.44	.20	.35	.07	1.00	.65	.13	.99
		POQ			Mean Ratings Made		
.48	.23	.33	.08	.84	.16	.04	.53
.38	.15	.03	.00	.05	.17	.02	.35
.14	.02	.55	.01	.11	.33	.01	.09
		POQ			Mean Estimates Made		
.38	.14	.35	.05	.66	.12	.02	.55
.21	.04	.56	.02	.33	.13	.01	.19
.13	.02	.03	.00	.01	.41	.01	.22
		POQ			Mean Ratings Received		
.28	.08	.66	.05	.91	.43	.03	.72
.15	.02	.22	.00	.09	.57	.01	.28
		Mean Ratings Made			Mean Estimates Made		
.90	.81	.30	.25	.48	.37	.30	.55
.74	.56	.28	.15	.30	.26	.14	.26
.60	.37	.24	.09	.17	.21	.08	.14
.54	.30	.06	.02	.04	.07	.02	.04
		Mean Ratings Made			Mean Ratings Received		
.52	.27	.22	.06	.89	.75	.20	.95
.21	.04	.17	.01	.11	.25	.01	.05
		Mean Ratings Received			Mean Estimates Made		
.56	.31	.75	.24	.96	.32	.10	.91
.20	.04	.25	.01	.04	.24	.01	.09

of the variance of the teacher description variables (the left set) is predictable from the teacher comments variables (the right set). Of this 19 percent, 82 percent (.15/.19) is accounted for by the first canonical variate and 10 percent (.02/.19) by the second. Typically in the Table 4.13 data, the second canonical variate accounts for very little additional variance. For the right set, the total redundancy is 26 percent, indicating a slightly better prediction of earlier teacher comments from current teacher descriptions.

These values of 19 and 24 percent are both quite low, though, and suggest a lack of relationship between these two sets of variables, and the probable futility of further attempting to develop a simplified structuring between these two sets of variables. Considering that the redundancy entries for all sets of variables except the ratings and estimates are even considerably lower, the conclusion for these near-zero redundancy pairings must be one of non-relatedness among the sets in the informational sense of overlapping information. Of the several sets of variables only the student ratings and their estimates of ratings made of them are interpredictable. The extreme independence among the various sets strongly suggests lack of a simplified factor structure for the several variables studied.

3. Principal Components Analysis. The principal components analysis is a widely used technique for examining differences among sets of measures using a limited number of dimensions. Computationally, the analysis proceeds from a matrix of intercorrelations to develop a factor structure accounting for a maximum amount of the total variance with the fewest number of factors. Essentially, the question asked through this procedure was, "How are the various experimental measures of the Portland student's academic achievement, teacher interaction, deportment, self-appraisal, school attitude, social relations, and social awareness organized?" In other words, "What is the factorial structure of these many student description variables?"

The Portland testing program involved an extensive data collection in six classes of eighth graders attending school in a predominately black urban area. The data, reduced to 45 variables by combining test and retest scores (see preceding subsection C. 1.), was further reduced to 37 variables by retaining only the current attendance measure, eliminating the IQ (available for only 52 students), the subtest SCAT scores, and number of siblings, and CA (nearly all students were either 13 or 14 years old).

The principal components analysis of these 37 retained variables utilized an SPSS factor program supported on an IBM 360/50 computer at the University of Oregon. Factors with eigenvalues greater than unity were rotated by normalized varimax procedures to simplify interpretations of factors. Ten factors were extracted representing 74 percent of the variance. The factor loadings that largely determined these ten factors are shown in Table 4.14. For reader convenience, loadings of .30 and less have been deleted. The obtained communalities representing the proportion of each variable's variance explained by the ten extracted components

Table 4.14

Rotated Factor Loadings of 37 Student Description Variables That Largely Determine Ten Factors

Rotated Factor Loading	Variable	Description of Variable
		Factor 1: Self-Description of Social Relations
.91 (.87)	314	Reports getting along well with opp. sex 8th graders
.73 (.77)	313	Reports getting along well with same sex 8th graders
.44 (.74)	316	Reports getting along well with school adults
.85 (.87)	324	Expects to receive favorable social relations ratings from opp. sex 8th graders
.69 (.76)	323	Expects to receive favorable social relations ratings from same sex 8th graders
.46 (.65)	326	Expects to receive favorable social relations ratings from school adults
.37	321	Accurate in estimating social relations ratings of himself by opp. sex 8th graders
-.40 (.47)	113	Relatively good school attendance
		Factor 2: Current Teacher Ratings
-.63 (.76)	106	Described by his teacher and unit leader as a non-behavior problem student
-.80 (.73)	301	Described by his classroom teachers as non-disrupting in class
.74 (.65)	302	Described by his classroom teachers as getting along well with them
.63 (.70)	300	Described by his classroom teachers as prepared or contributing to class work
.32	303	Described by his classroom teachers as getting along well with his classmates
.44 (.74)	316	Reports getting along well with school adults
.36	326	Expects to receive favorable social relations ratings from school adults
.37	322	Relatively accurate in estimating social relations ratings of himself by his teachers

(continued)

Table 4.14 (continued)

Rotated Factor Loading	Variable	Description of Variable
		Factor 3: Self-Description of School Environment
.94 (.92)	304	Expresses favorable attitudes toward school in general
.94 (.92)	305	Expresses favorable attitudes toward school work
.91 (.91)	306	Expresses favorable attitudes toward teachers
.88 (.86)	307	Expresses favorable attitudes toward peers
		Factor 4: Self-Description of Social Relations with Recall Persons
.82 (.75)	327	Expects to receive favorable social relations ratings from recalled adults
.77 (.76)	325	Expects to receive favorable social relations ratings from recalled peers
.36	326	Expects to receive favorable social relations ratings from school adults
.31	323	Expects to receive favorable social relations ratings from same sex 8th graders
.77 (.71)	317	Reports getting along well with recalled adults
.72 (.72)	315	Reports getting along well with recalled peers
		Factor 5: Self-Appraisal Regarding School and Family
.85 (.79)	311	Expresses favorable self-concept in general
.78 (.78)	309	Expresses favorable self-concept regarding family
.67 (.62)	308	Expresses favorable self-concept regarding peers
.67 (.69)	310	Expresses favorable self-concept regarding school work
		Factor 6: Behavior Reports by Former Teachers
.83 (.78)	104	Described favorably by former teachers regarding social adjustment
-.72 (.71)	105	Described favorably by former teachers regarding behavior problems
.58	103	Described favorably by former teachers regarding school work

(continued)

Table 4.14 (continued)

Rotated Factor Loading	Variable	Description of Variable
		Factor 6 (cont.)
-.55	106	Described by teacher and unit leader as a non-behavior problem student
.44	303	Described by his classroom teachers as prepared and contributing to class work
		Factor 7: Minority Race Problems (Not Being Black)
.79 (.75)	89	Non-black
-.73 (.77)	318	Receives unfavorable social relations ratings from same sex 8th graders
-.55 (.70)	319	Receives unfavorable social relations ratings from opp. sex 8th graders
-.31	323	Expects to receive unfavorable social relations ratings from same sex 8th graders
-.42	320	Inaccurate in estimating social relations ratings of himself by same sex 8th graders
-.50 (.64)	303	Described by his classroom teachers as not getting along well with classmates
		Factor 8: Academic Achievement
.89 (.85)	99	Achieving higher verbal and quantitative SCAT scores
.87 (.85)	100	Achieving higher reading test scores
.61 (.61)	103	Described favorably by former teachers regarding school work
		Factor 9: Social Awareness
.62 (.50)	312	Achieved higher PIT scores
.60 (.68)	322	Accurate in estimating social relations ratings from school adults
.57 (.68)	320	Accurate in estimating social relations ratings from same sex 8th graders
.42 (.55)	321	Accurate in estimating social relations ratings from opposite sex 8th graders
		Factor 10: Maleness
.82 (.81)	2	Male
-.50 (.70)	319	Expects to receive unfavorable social relations ratings from opposite sex 8th graders
-.38	321	Inaccurate in estimating social relations ratings from opp. sex 8th graders

Note: Communalities are noted in parentheses next to that variable's largest factor loading.

are noted in parenthesis to the right of the largest factor loading for that variable. To aid in summarization, the factors are presented with descriptive names and the variables as student behavior descriptors.

The multidimensional nature of 37 student description variables is evident in the dispersion of factor loadings presented in Table 4.14. Ten factors had eigenvalues greater than unity. Over two-thirds of the 37 variables had communalities greater than .70; nine had communalities above .80. Most of the ten factors are identified by two or three high loading variables with relatively little additional loading from variables common to more than one factor.

The first factor largely consists of the peer social relations measures, in particular, ratings made by 8th graders of how well they get along with other 8th graders of same and opposite sex and estimates they made of how these other 8th graders rated them. This factor also had minor loadings from student ratings and estimates regarding getting along with school adults and on their accuracy in estimating how peers (particularly opposite sex 8th graders) rated them. School attendance, which also loads somewhat on this first factor, has generally negligible loading on any other factor and a total common variance of only 47 percent. In all, the first factor accounts for 19 percent of the total variance of the 37 variables.

The largest loadings on the second factor were for those variables based on current teacher ratings and descriptions of their students' in-class disruptiveness, general behavior problems, and teacher-student relationships. Student ratings as to how well he gets along with school adults, the ratings he expects from these adults, and his accuracy in making these estimates all have minor loadings on this teacher rating factor. This second factor accounts for 13 percent of the variance.

The four subtest scores from the Pupil Opinion Questionnaire band together to form the third factor, a self description of the student's school environment. All four subtests have loadings in the high .80's or .90's and these subtests remain clearly separate from all of the 33 student descriptors. This factor accounts for eight percent of the variance.

The fourth factor principally consists of student social relations ratings, estimates, and accuracy measures all involving recalled persons, that is, adult and peer persons personally known to the student and added by him to his rating and estimating list. Apparently, ratings and estimates made of these recalled persons are factorially distinct from ratings and estimates made of school adults and other 8th graders, though estimates of ratings made by school adults and by same sex 8th graders have minor loadings on this recall persons factor. This factor accounts for eight percent of the variance.

As with Factor 3, Factor 5 involves only subtests from a single student description instrument, in this instance, the Self Appraisal Inventory. Items on this inventory were designed to measure the student's

self concept regarding family, peers, schoolwork, and self-in-general. These measures apparently separate from all of the other 33 student descriptor variables included in the analysis. The self apparisal factor accounts for six percent of the variance.

Three of the five variables with non-trivial (>.30) loadings on Factor 6, are derived from teacher commentaries regarding their student's social and school behaviors in earlier terms. The remaining two variables are current teacher descriptions. The distinctness of this factor appears to be continuing or persisting adjustment problems in the school setting rather than the more current focus of Factor 2. This prior teacher report factor accounts for five percent of the variance.

Factor 7 is especially interesting in that it has a singularly positive high loading from race (non-black coded high) and high negative loadings from ratings received from other 8th graders of both sexes. The classroom teacher ratings of how well their students get along also loads negatively on this factor, as do the student's expectations of ratings from same sex 8th graders and his accuracy in estimating these ratings. Apparently this factor reflects problems in minority race relations, the less than 25 percent of non-black students receiving and expecting to receive lower social relations ratings from the other 8th graders. This factor accounts for five percent of the variance.

Factor 8 is clearly academic achievement oriented with major loadings from the SCAT total score and the Metropolitan Reading Test score and a further substantial loading from the teacher comments regarding previous terms' schoolwork. No other student description variable has more than negligible loading on this factor, the largest of these being only .23 for present term schoolwork ratings. The academic achievement factor accounts for a brief four percent of the variance.

The Picture Interpretation Test score and the three measures of accuracy of estimation of adult and peer social relations ratings of oneself together comprise Factor 9. In reporting that this social awareness factor accounts for only three percent of the variance, it should be recalled these measures, before combining into a composite score of first and second test scores, all had relatively low test-retest correlations. The extent to which error variance may have depressed this factor is, of course, unknowable from the present data.

The only variable with a high loading on the final factor is sex (males coded 1, females 0). The two other variables identifying this maleness factor are expected social relations ratings from opposite sex 8th graders and accuracy in making these same opposite sex estimates. Both have moderate to low negative loadings. This final factor also accounts for only three percent of the variance.

In overview it must be concluded from the foregoing factor analysis summary that the 37 student descriptor variables fail to reduce to but a few generally distinct factors. Though the analysis was instructive in identifying some unsuspected groupings or dimensions such as social awareness, social relations with "recalled persons" as separate from those involving school peers and adults, distinguishing between present

and prior term teacher descriptions, a minority race factor, and sex as a separable (though unclear) focus, the major finding was that of the multidimensionality of the many measures taken of student social and school behaviors, attitudes, and skills.

Following a description of trials of two experimental educational units initiated in Schools N and M, a final section of this report (Section VI) will offer a summary of the social competency measurement efforts in both the Portland and the Eugene area schools.

Section V

DEVELOPMENT AND TRIAL OF EDUCATIONAL UNITS

A. School Settings

The final phase of the project was an exploration of two possibilities for educational units, each of which might lead to a larger curriculum for the remediation of social competency deficits of 8th graders. These units were the outgrowth of extensive discussion with school and community informants regarding the behaviors and needs of the students, particularly as these related to school performance and peer relations. For both units, 8th grade teachers were directly involved in the planning and mapping out of the intended daily classroom activities. The two units, one ten weeks long and the other eight weeks long, were trial run as part of a regular social studies class in two Portland elementary schools in the fall of 1971.

The school settings have already been described in the first pages of the preceding section, Schools M and N each enrolling approximately 600 elementary children from the predominantly black Albina district of Portland, Oregon. Each school had three classes of 8th graders of approximately 28 students each. One class in each school was selected as a trial class for the experimental units.

Both experimental class teachers were white and had several years of teaching experience. Both were assigned practice teachers to assist them in conducting the educational unit. The class N teacher was female; her aide was a white male completing his practice teaching in a lower grade in School M. The class M teacher was male; his aide was a black female also completing an elementary education degree program by practice teaching in School M.

The School N class consisted of 16 boys and 13 girls, all black except for one white boy and one American Indian girl. The School M class consisted of 11 boys and 15 girls, all black except 4 white boys and 3 white girls. During the trial period, six experimental class students withdrew and three new students entered. In addition, both classes had a high rate of absences (some due to suspensions), averaging 4 or 5 students out of class on any given day.

As described generally by their teachers, the students in these schools are considered to be emotional and responsive, but not thoughtful about their actions. They live very much in the present. They are extremely active physically and seldom hold still for more than a few minutes.

They are impatient with any hesitation or delay and things must be kept moving at a rapid pace to keep their attention. There is little pressure from the family to do well in school (approximately half the students do not live with their parents) and most of these students cannot see any present or future value in academic pursuits; consequently, most are not good students even if they could be. These negative attitudes toward authority and school in general are so great that peer pressure does not allow a student to express any interest in academic activities even though he may actually feel some interest.

Teachers seem to feel that their control of the class is constantly in jeopardy. They tend to go along with the mood of the class, waiting for the group to "settle down" before they try to do anything related to schoolwork; after a particularly exciting event which stirs the students up--such as a serious street fight--this settling down period may take several days, during which the teachers often fall back on structured studies such as spelling lessons on an individual basis. These students have had almost no experience working in groups; they have not examined the possible desirability of working with someone they do not especially like in order to get a certain job done.

B. Cooperative Production Unit for School N

1. Development of Unit. In the spring of 1971, the project co-director moved to Portland and spent three months investigating the school system, contacting community representatives, and working with administrators and teachers in the selected schools to develop an educational unit to be scheduled for the next fall. Her assistant was a black woman who was just finishing her final year of teacher training in School N and would be teaching social studies there as a regular teacher the next fall. In reviewing several possibilities for curriculum development, additional teachers and school personnel were consulted. They concurred in recommending a proposed ten week production-management unit.

The project codirector worked closely with her assistant to outline an educational unit--its focus, methods, and hoped for results -- then moved from Portland, leaving the working up of specific daily lesson plans to the assistant to complete over the summer. As these plans were produced, the original idea was modified into a cooperative production unit in which the class would form several small coops, each manufacturing and selling a simple craft item. Under this arrangement, the emphasis would be upon group cooperation--the groups would have to work out their own problems and would receive help with discussion skills in order to do this. They would work toward developing an appreciation of different kinds of talents and personalities, and hopefully they would discover the satisfaction of working together successfully.

Emphasis upon development of group cooperation was well supported by the consulting school personnel as a social competency clearly lacking among their 8th grade students. The unit design called for ten weeks of daily sessions of approximately one hour each, with Fridays left open as an extra period which might be used to catch up on anything not completed during the first four days of the week. All activities were planned for the afternoon home room social studies class, which comprised a two-to three-period block of class time.

The unit's activities were designed to involve the students in making group decisions and analyzing how well their group is working. Group discussions were at first to be based on making practical decisions about the products, and later students were to be encouraged to discuss their own and others' feelings. In this way, they would develop a greater awareness and understanding of each individual's importance to the group effort.

The unit activities were also meant to develop a sense of responsibility in the 8th graders. Each small group of approximately five students would be responsible for organizing itself--choosing its own officers, making its own decision about what article to manufacture, and setting up its own work schedule and production system. Any personal problems between group members, or such decisions as what to do about the member who is not working, were to be worked out by the group itself.

Incentive for the students to carry through the manufacturing process and continue to produce the articles even after the novelty of doing something different in class had worn off was to be provided by the expectation that their articles would be purchased and the profits divided among the group members. A buyer from a craft shop was scheduled to visit the class during each of the two production periods (the first one of six weeks, the second of four) to discuss prices and quality. Then, at the end of each period, he was to return to do the actual buying. Buying was underwritten by the research project, but the articles would actually be put on sale in the craft shop.

After the introduction to the unit had been presented to the class, the teacher and the curriculum aide were to play low-key roles, encouraging the pupils when needed but not forcing them in any particular direction. In effect, the teacher and aide were to serve as impartial moderators in pointing out what was actually happening in group discussions and in offering technical assistance during work sessions. The students would have to live with the results of whatever they did and did not do.

When the groups reorganized for the second production session, students in those groups which had had bad experiences would have the chance to analyze their group's problems and do better the next time. The second production session would also provide a chance for each student to work with new partners and reduce the monotony of the group interactions. The teacher was to arrange the composition of each of the first set of groups, breaking up cliques and separating problem children, but the second set of groups was to be organized by the students themselves after they had a chance to see how and which people work together. Possibly,

they would have learned that best friends are not necessarily the best workers and would have learned to appreciate the abilities of some students they did not know before. The entire process, then, was to be one of encouraging students to organize and to make group decisions, to solve both practical and social interaction problems, to look at their own and their peers' behavior and decide what kinds of behavior will bring successful results, and to learn to discuss these matters openly and honestly.

2. Schedule of the Cooperative Production Unit

a. First Six Weeks Session

Week 1. Introduction

Introduction and practice of discussion and analysis skills by means of game-playing, graphic illustration of chains of events, audio-visual materials.

Introduction to production unit, what students will be doing, explanation of how a coop organization works, emphasizing importance of individual to effectiveness of whole group.

Division of class into five groups of five or six members each, composition previously determined by the teacher.

Introduction and practice of techniques of problem-solving.

Week 2

Field trip to three or four downtown shops to have students investigate types of products which are selling, prices, materials, etc.

Election of officers in each group.

Discussion within groups of what products to make. Groups each make decision on product and prepare a list of supplies needed.

First work session. (Supplies have been obtained by teacher.) Group decision on manufacturing procedure, time schedule, etc.

Week 3

Alternate work sessions and discussions.

Class discussion of problems that arose during first work session. Each group tries to work out solutions to its own problems.

Discussion of individual contributions to groups' problem-solving attempts and written report by each student.

Week 4

Alternate work sessions and discussions.

Analysis by group members of individual member contributions.

Week 5

Class discussion of progress of manufacturing and product quality and saleability.

Visit from buyer, who talks to each group about the quality of its goods, what he is looking for, possible pricing, grading of goods.

Group discussions regarding what buyer has pointed out, need for production changes, whether or not to accept his price offers, etc.

Continue work sessions.

Week 6

Alternate work and discussion sessions.

Group discussion of individual contributions to completion of products.

Final visit from buyer, purchase of goods, and distribution of profits among group members.

Evaluation by each group of its production and interpersonal relationships during the entire six weeks.

Last Four Weeks Session

Generally, this will be a repeat of the entire process, but without the need for introductory materials or the field trip. Since the students have had practice in decision-making, the shorter production session of four weeks should be adequate. This time students will choose their own small groups, with the one restriction that each group be balanced by sex. Once again, discussions and work sessions will alternate or combine, the buyer will come during the middle of the session, and group members will be asked to analyze their own and others' contributions. Students will also be asked to discuss whatever went wrong during their first session and how to avoid these mistakes in the new groups. Buyer will return at end of four weeks to select goods for purchase, profits will be divided, and each group will prepare an evaluation of its activities.

3. Trial of Experimental Unit (School N)

a. Introduction to Unit. The cooperative production unit was introduced into School N during the afternoon social studies period in the fifth school week of the fall 1971 term. The introductory games and problem-solving exercises of the first week of the curriculum went well.[1] These consisted of a "falling game", in which one student would allow himself to fall and be caught by the others; a tower of blocks in which each block represented a student, used to illustrate group strength arising from interdependency of its members and leading into a discussion of the nature of a coop; and problems for group decision, (1) to arrange a list of desirable occupations and (2) to decide what five items would be most necessary for desert survival.

The students enjoyed talking about the problems as a total class, especially when there was no obvious answer, but when they separated into their small groups, discussion fell apart and the group leaders became tyrannical. Each group then chose a spokesman to get up in front of the class and explain why his group made the choices it did. These students were listened to with interest and attention by the others.

During this first week, the teacher had decided the composition of the first small groups. The most important consideration was simply that the groups should function, so she created five groups of

[1] A one-week tryout of some of these activities had been conducted during the summer involving seven School N eighth graders.

five or six members each around the nucleus of a strong personality whom she predicted would become the group leaders (which they did). Other considerations were balancing the sexes and different levels of ability within each group, and breaking up some of the friendship groups already formed by the students.

The choosing of a group leader and a recorder was done by a process of mutual consent. Someone would suggest who should fill the position and the rest of the group would agree or disagree orally until they had agreed on someone. The teacher reports that these choices were made on the basis of ability, not necessarily on popularity.

b. Selection of Candlemaking. Because these students had had little experience in making things, they needed to get some preliminary idea of what kinds of articles they might be able to make, what materials would be needed, what they would cost, and how long the manufacturing process would take. A field trip to downtown craft shops was arranged so that the students might see and inquire about the articles for sale. It was planned that the students' completed pieces would be placed for sale in one of these shops, and from this trip the student could get the idea that their project had some connection with the real world, could be more than just a school assignment.

Two shops which had been contacted in advance were visited; two-thirds of the class went to one shop and one-third to the other. Each student was given a dittoed form stapled to a piece of cardboard on which to take notes. They enjoyed the trip, especially since few of them had been to this downtown area before, and returned to class with several ideas of what they would like to make. Each student handed in a list of choices to the teacher, who read through them and noted the items she felt were impossible to complete. Suggestions at this time included leather items, macrame, pottery, popcorn and candy, belts, posters, candles.

A demonstration by the respresentative of a large craft supply house caused a major difficulty, in the sense of compelling a departure from the intended organization and purpose of the unit. His overwhelmingly colorful candlemaking display so inspired the students that they all insisted on making candles and nothing else, saying that if all groups were not allowed to make candles, none of them would do anything at all. In retrospect, it is unfortunate that the teacher agreed to this demand.

The choice of candlemaking in effect led to individualized rather than group production. The fact that candlemaking required a hot plate and a panful of hot wax meant that each student had to be individually supervised by an adult. Each student brought his own container from home, went by himself to where the curriculum aide was tending the hot wax and poured his candle quite independent of his group. The teacher aide was actually more involved with him in this activity than any classmate. The only small group structure that survived this procedure was in seating arrangements and in the fact that one group per day was scheduled to pour its candles, with the group leader setting up turns for his

group members. The rest of the class continued its regular social studies work under the teacher's direction.

Further breakdown of the small group system came about because of absences and suspensions. There were often as many as 5 or 6 students absent from class, with the result that more than one person was missing in some groups. The teacher reported that some groups were resentful when absenteesim caused them to lose their turn, but there was evidently not enough pressure to be present placed on the students by their peers to cause the general pattern of absenteesim to change--and the absent members were often the group leaders. In fact, the original class leader, a girl who was clearly in charge and whose cooperation could have made the entire unit work, transferred to California. Her replacement was more temperamental; sometimes cooperative but sometimes controlled by her violent temper. Another person who might have inspired the class to greater efforts was an artistically talented boy who was so turned off by other aspects of school that he rarely came.

c. Buyer's Visit. The unit outline called for a classroom visit from the "buyer", an individual hired by the project to play the role of a buyer from a downtown shop. He was to inspect the products, discuss their quality, give advice on how they might be improved, and discuss possible prices. He was to announce that he would return at the end of the six weeks' session to purchase the better pieces for a downtown shop. It was intended that this visit would reinvigorate the students after the first enthusiasm had died down, that it would excite them to try to improve quality and increase production by once more emphasizing that they might actually make some profit if they would work for it.

The buyer, a black local church leader, apparently gave some students such bad time about their work that the entire class came to their defense; remarks were made to the effect that "if you don't like it, we'll sell it to someone else". After his visit, the class decided they would do their own selling. Several students independently found buyers for their candles before the project was finished.

d. Vandalism. There were no secure storage facilities in this overcrowded school and neither teacher nor aide could readily carry all the equipment back and forth (and the candles had to remain where they were for several hours until set). Supplies and products were therefore left exposed in the classroom. This proved to be quite unfortunate. Before the end of the six weeks, most of the finished candles had been stolen or destroyed, mainly by students from other classes who were using the room temporarily. One final instance of vandalism in effect ended the actual candlemaking operation. While the room was unattended, a student who had recently transferred into the experimental class melted a piece of wax directly onto the burner of the hot plate, letting it run down inside and then turning off the burner and removing

the wax from the top of the plate. When the hot plate was next used it burst into flame and was ruined.

Though this ended the candlemaking project, the students seemed to accept such disasters as a normal part of life and were not particularly discouraged. They did not even seem to consider it as a monetary loss. Possibly the idea of making money was too far in the future to be of much concern to them. Several students expressed regret that the groups had not functioned well, and all students were willing to reform their groups and try something else. Therefore, a revised plan was prepared for the last four weeks of the unit.

e. Revised Plan. The revised plan called for a return to the original intent of the unit, to emphasize each group's making its own decisions and learning to work as a group for the profit of all. This time only two groups were to be formed, making each group large enough so that absences of a few members would not cause the group to be inoperable. Each group would be required to choose a different product and work independently from the other group. Each group would have a specific problem to solve every day, either one relating to manufacturing the item or one set up to make the members aware of the dynamics of the group. The buyer would return at the end of the ten-week session as originally planned and pick up whatever candles were left from the first session as well as the saleable articles from the second; or, the students might decide to do their own selling, in which case the problems of organizing the sales and distributing the profits could take up a good part of the group discussion exercises.

Groups were formed this time by the students themselves. The highly vocal, strong leader types of students formed one group with their friends and others having similar personalities; the rest of the class formed the other group, but they were not merely "left-overs"--at least some of them were the students who wished to work with each other because they felt they were the ones who would get something done.

Again, there was a period of investigation and discussion of what to make. Students looked through craft catalogues and instruction books and then made their decisions--one group wanted to make pillows and the other aprons. Once again enthusiasm was high and this time the groups did a much better job of organizing themselves.

Unfortunately, nothing further came of this preparation. One week was completely lost because nine students who had been suspended returned to class on the same day and so unsettled the class that everyone was given individual work assignments for the rest of the week. The following week, the curriculum aide was absent and the teacher did not feel she could continue working on the curriculum unit without help. After this, time until Christmas vacation was too short to start on a new activity and the students' interests became diverted. Due to limited project time and budget the unit was not continued following Christmas vacation.

4. Evaluation and Recommendations. In spite of failure to produce items for sale and to function on a small group level, the experimental class did achieve some positive results. Both teacher and aide agreed that the class had developed a unity as a total class that had not been there before the curriculum began. Student written comments collected during the trial period indicated considerable support and numerous expressions of group feeling. The students took an interest in each other's work and would encourage and defend even those students who were not in their own friendship groups. In short, they appeared to have gained a start in the techniques of working together. Given fewer interruptions and more focused classroom activities, a much more substantial gain could surely be expected. Further trial of a revised unit is to be recommended.

In preparing a further revised unit, four major problem areas require careful consideration. First, there needs to be a responsible project representative on the scene at all times to support the teacher, facilitate solving of problems on a daily basis, make on-the-spot revisions in the unit plan, and generally force continuity of the unit regardless of interrupting events.

Second, the educational unit itself needs to be more tightly structured--students must have something definite to do each day. It should have a fast pace and varied activities to hold the students' attention. Too much planning should not be left to the teacher, who operates in a constantly tense atmosphere and has many other things to consider.

Third, though full class discussions worked well, small groups generally were not able to make decisions on their own. More specific exercises in group decision-making are needed, including practice assignments. The teacher or aide would probably need to work closely with each group as it practices group discussion each day, develop records of progress (and problems), and increase or improvise practice as needed. In this regard, pre-unit special teacher and aide training in group discussion techniques might be required.

And fourth, the unit activities must be better accomodated to the problems of the particular setting. During the experimental trial high absentee rates frequently left the small groups inoperable, and new students transferring in in the middle of the unit were not easily absorbed. In general, the curriculum must be designed so that the absence of one or two out of a group will not destroy the entire activity. For example, there might be alternative exercises written in, the choice of which one to use each day depending on the number of students present. In the present situation, storage and protection of materials were also needed.

C. Videotape Unit for School M

1. Development of Unit. As may be recalled, School N and M differed in that the latter school was located in a more biracial neighborhood and enrolled 25 percent non-black children. The previous school year (1970-71) had witnessed considerable racial tension both in the

neighborhood and school. Though lack of group functioning skills was considered a primary social deficit of students in both School M and School N, the special atmosphere and kinds of problems at School M regarding racial conflict seemed to call for the development of a curriculum with a double approach. Not only did the students need work on group function but they would also benefit from a program emphasizing different ways of looking at a situation involving people, at the problems deriving from interactions among persons with differing concerns and biases.

The utilization of role-playing experiences has been extensively documented in recent literature supporting personal involvement in dramatization as a means of improving social understanding and interperson behavior.[1] If students were required to place themselves in the roles of people unlike themselves and try to imagine what actions could bring about different outcomes to a situation, then possibly they would increase their understanding of how to get along better with each other. If students were obliged to work together, delegating and assuming responsibilities for task completion and group achievement, with guidance, these activities should promote group functioning skills.

The video tape educational unit for School M developed from a blending of these two broad intensions. A white male social studies teacher in School M with some experience in dramatics evinced a special interest in the proposal. Working with the project coordinator, together they developed an outline for an eight week unit to be tried with his fall class. A black female practice teacher with experience as a professional entertainer was assigned as his aide during the trial of the experimental unit, and was also involved in working out the specific plans.

The unit called for an eight week planning and production of videotape vignettes of scenes based on experiences the students have had. The scenes were to be of various kinds of social relationships, conflicts, problems and resolutions, etc., that the students have come across, probably in school but possibly in the family or other out-of-school settings. Planning, enacting, and editing of the scenes were all to be done by each of four groups of seven or eight classmates. Through their roles as group members--officers, writers, actors, and technicians--the students would be learning that personally satisfying interaction requires that they depend on others and in turn be dependable. And through analysis of their own experiences--situations and motives and feelings of the characters in the vignettes--the students would be learning about themselves and perhaps be able to look at a situation from more than one point of view.

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[1]See Boies, 1972 for an excellent review of role-playing as a behavior change technique.

2. Schedule of the Video Tape Unit

a. First Week's Activities. The first week of the curriculum was to consist of introduction of the unit to the student, including a definition of "vignettes" and some exploration of how they are made. The students would view prepared films and discuss them to think about what situations from their own lives might be appropriate for filming. The teacher and the curriculum aide would act out a situation in front of the students as a demonstration; this situation would be enacted from several viewpoints and with several different outcomes so that the student would start thinking of how different behaviors may cause different results.

Also in the first week, students were to be divided into four groups of approximately seven members each. The teacher would have chosen group members beforehand, making groups as heterogeneous as possible and keeping the clique members apart. After being presented with a review of officer responsibilities and viewing a film on "Groups Working Together" and discussing the function of a group, each group would choose its officers--president, vice-president, secretary, and assistant secretary. Each group would be responsible for developing and presenting its own vignettes and the students would eventually choose which members were to be actors and which technicians. (Groups were to remain formed for two weeks, and then students would change groups so that everyone had a chance to work with everyone else during the eight weeks. Also, students would be encouraged to change roles within the group so that each individual had a chance to try each position.)

On the first Friday, students would go on an orientation visit to the filming studio. Students would become acquainted with the technician who would be helping them with the filming, be introduced to the equipment (which they would eventually learn to use themselves) and take part in a sample filming which they would immediately see on the playback machine.

b. Following Weeks. After the curriculum had been introduced and the vignettes were being produced, activities were to follow a fairly standard weekly pattern for the second through seventh weeks:

Mondays: Viewing and reviewing the video-tapes made the previous week. Class discussion of each vignette on the basis of effectiveness in getting its point across, and consideration of other ways in which the portrayed situation might have been handled.

Tuesdays: (Every two weeks, class separation into new groups, choices of new officers.) Groups pick a subject for their vignettes and begin working on the scripts, all group members taking an active part in making up lines, deciding if they want any kind of sets, sounds, or special effects and making necessary arrangements.

Wednesdays: Final polishing of scripts and selection of actors and support persons.

Thursdays and Fridays: Filming vignettes (two groups each day) and rehearsal for in-class group.

c. Final Week's Activities. Class was to review all vignettes and choose those which they wanted to include in a final film of approximately 20 minutes in length. They were to decide on the sequence of the scenes and work on coordination, titles, credits, and whatever other details needed consideration for the finished product. Students involved in these details were to make a final trip to the studio to put the entire package together. Then the film was to be shown to other classes or perhaps the entire upper unit. The last day of the unit was to be taken up with a class discussion on the overall effect of the unit on the students, how cooperation with others and placing themselves in different roles had affected their general outlooks.

3. Trial of Experimental Unit (School M)

a. Introduction to the Unit. The teacher explained briefly to the class what they would be doing for the next eight weeks--forming four small groups within the class every two weeks, choosing their own officers, creating scripts for videotaping, and filming these at a television studio. He told the students that their scenes, if good enough, would eventually be put together into a movie which would be shown to other classes.

The initial class response was that the more difficult students were generally interested, especially when told they might be allowed to use the cameras themselves, but the better students went on with their studies and seemed to pay little attention. (Students later made a vignette dealing with this announcement in which the announcement was rather abrupt and their reaction to it was to play hookey.) There followed a discussion of the vignette form, and the teacher tried to make certain that all students understood what it is and what it is for. The students were told to discuss any ideas they had at this point for vignettes and to write them down and hand them in. They needed much help from the teacher and aide to come up with anything at all. However, by the end of the period, 13 out of 22 students present did manage to hand something in.

The teacher divided the class into four groups of approximately seven members each on the basis of heterogeneity (sex, ability, personality) and separation of clique members. Students complained loudly at this first assignment of groups, insisting that they were not interested in working in groups at all, but eventually accepted the arrangement.

Each group chose a chairman, who was to be responsible for general group control and production and for supervising the selection of actors and cameramen, a vice-president, a secretary-recorder to keep notes on script lines and group decisions, and an assistant secretary. Officers were chosen by oral mutual consent except for one group which had a volunteer chairman.

As the groups began writing their first plays, the interest level was high in all but a few students who refused to participate. Three groups worked out their ideas together, but in the fourth, one boy who was resented by the others, possibly because he was white and definitely because he was pushy about his abilities, went off and wrote a script by himself. The group did eventually use his idea, not being able to come up with anything else. By the end of one more class period, all four groups had their scripts written and were helping each other learn the lines, excited by the prospect of going to a studio for filming.

b. Videotaping Facilities. The Portland School District's Instructional Television (ITV) Department, located in another elementary school only a few minutes away from School M, provided the filming facilities for the videotape unit. This studio was well equipped with cameras, lighting banks and a large control room. The personnel were extremely cooperative in setting up filming schedules, in explaining to the students how to get good results, and in giving some direction to the filming sessions. They also created sets when the students indicated that they were needed.

The first visit to ITV was organized as a full class field trip, and student behavior was unusually good for so large a group. They were given a tour of the studio with explanation of the equipment and had their questions answered. One group had their lines memorized well enough that they could perform before the camera as a demonstration for the rest of the class, and the cameraman used them to illustrate his explanation of what is necessary in front of the camera to produce a good tape. The ITV director explained the professional way to prepare set layouts to accompany the scripts. The students were disappointed to learn that they would not be allowed to handle the cameras themselves after all, but they were told they could bring their tapes to the studio and use the hand-splicing equipment to edit them.

c. Vignette Production. On the first day of each week the class viewed on closed circuit TV broadcast from the ITV studio the tapes they had made the week before. They discussed their work and were asked to analyze the success or failure of each scene. Too often, however, the general uproariousness caused by seeing themselves on a television screen led to a lack of seriousness in their discussion. Further, students were generally unwilling to criticize each other. One offshoot of their supportiveness of each other's work was an expressed resentment of the teacher's attempt to get them to improve.

The second and third days of each week, teacher and aide worked with the groups, helping in their development of new ideas and the improvement of old ones. The last two days of the week were set aside for filming sessions. The teacher remained in the classroom and the curriculum aide and an assistant from the school took actors and critics from two groups to the studio to tape their vignettes.

Initially, only one student refused to act a part in the vignettes. He did take a non-speaking part later when one of the groups was short an actor and convinced him he really was needed, and his attitude in general improved steadily as the unit went on. The first two days of filming went well. Students were well-behaved in the studio even though they had to wait quite a while for the other group to finish. They remained interested and excited by the studio activity. In subsequent weeks after the novelty of filming had worn off the students became a little more restless and had to be restricted from the control room, though discipline was never a real problem.

Every two weeks four new groups of approximately seven students each were formed. This gave each new group the opportunity to do two vignettes, which would have resulted in a total of 24 vignettes for the six weeks of filming after the introductory week. Actually, only 15 vignettes were completed. A number of problems contributed to this low rate of production. A major problem was the continuing high percentage of absences and suspensions. Usually at least six students were out of class each day, which meant that the scheduled group often did not have all its actors. A further problem was the loss of filming days due to school holidays and field trips. Improper scheduling due to misinformation as to the ITV studio schedule resulted in two cancelled filming sessions. Having a substitute teacher on four occasions during the last six weeks contributed to some of the script production slowdown

More damaging to the total unit's activities, however, was the general falling off of student enthusiasm. For most of the students their interest and productive support lasted only two weeks. The work of creating and writing the scripts fell to one or two more interested students in each group who eventually carried the total load. The plan for group officers to assume supervisory responsibilities for script and film production received little student support after the initial weeks.

Two attempts were made during the last half of the unit to revive student interest and to get them to go further with their ideas. The first was the use of a 16 mm. movie camera to more readily capture school interaction scenes for later development as videotapes. Students were not much interested in using the equipment (for this purpose), and delays in film processing and eventual film theft ended usage of the movie camera. The second attempt was the installation in the classroom of videotape playback equipment to encourage more detailed and critical examination of filming efforts. Delays in obtaining this equipment however resulted in its being used only in the last weeks of the unit.

4. Evaluation and Recommendations

In spite of much lagging by individuals, the groups as a whole did manage to produce vignettes up until the end of the unit. Some of the latter skits are more complex, one play being divided into three scenes with a time lapse between each and having changes of setting and mood. In general, though, the vignettes were very weakly developed, simple scenes with artificial lines and stilted acting.

It was intended that in response to their own dissatisfactions after viewing the tapes, students would request adult guidance; instead they were generally uncritical. Though some progress in production skill was made, the lack of experienced direction remained very apparent.

Though poorly written and portrayed, the vignettes afford interesting expressions of what the students think about various aspects of their culture, their parents, homes, school situations, and neighborhoods. Their stories covered a fairly wide range of plausible interactions--a family with a favored and disfavored daughter, boys caught stealing by a saleslady, a dominating mother arguing with her husband about money in front of her daughter, students reporting to their teacher on another student smoking, a teacher sending gossiping girls to the office, another sending fighting boys to the office, girls discussing a boy friend, students getting caught playing hookey, a policeman being knocked down, black adolescents vandalizing a white home, drug peddling, and a white girl put down by a white family for selling Girl Scout candy with a black girlfriend.

In terms of the main purposes of the experimental unit, developing group support skills and improving social relations through increased understanding and acceptance of different points of view, the eight-week experimental unit of student production of videotape did not achieve its goals. Evidence is lacking to suggest any improved self or other-person understanding. At the same time, the breakdown of group effort toward videotape production argues a lack of group cooperation and general responsibility.

The videotape unit was developed with the participating classroom teacher as an outline for implementation rather than a tightly scheduled sequence of classroom activities. This flexibility seemed necessary for a first trial, but even with the added support of an enthusiastic assistant the continuous demands of the regular classroom activities did not allow time for needed improvisations and expansions of the unit outline.

And apparently, in addition to more anticipatory planning and ready-to-go alternatives, a very considerable leadership and direction is needed to get students sufficiently involved that they acquire understanding of the different perspectives presented in the vignettes. At a more shallow level, the actor may well simply re-enact and reinforce his prejudice. Indeed, this latter effect was suspected by both the teacher and aide.

And the very major problem of sustaining active student support in a problem school setting needs much more attention. The incentives, one, the novelty and personalization of the videotaping and, two, the goal to produce a display item quickly dissipated. To maintain high interest the unit must have nearly continuous returns for the students, an increasing identification of the participants with their activities. This clearly needs considerable pre-unit development.

Section VI

OVERVIEW OF PROJECT

A. Project Summary.

1. Introduction. The foregoing four sections have presented a detailed description of project activities spanning a three-year period.[1] The project was inaugurated as an effort to define, explore and develop experimental measures of social incompetency. The study populations were adolescents living in white semi-rural communities and 8th grade students, principally black, living in an urban district. As outlined in the initial research proposal submitted to the Social and Rehabilitation Service in 1968, the measurement effort had a further, treatment-focused goal, the development of classroom remedial responses to social incompetency. Accordingly, experimental educational units were devised and tried out in two urban classes during the last months of the project.

Discounting the hundred special class retarded adolescents tested on the experimental short forms of the TSI (reported in the TSI addendum) and an equal number of regular seventh graders trial tested in developing group administrable forms of this test (subsequently called the Picture Interpretation Test) and the near hundred adults and adolescents involved as responders to Parker's Social Inventory Checklist, none of whom otherwise involved in project testing, the project studied over 300 junior high students, with 51 of their teachers contributing extensive ratings and/or descriptions of them and 34 of their families providing interview data.

In summarizing the testing procedures, data analyses, and unit trials involving various samples of these students and adults, this final report section provides an overview of project activities. A briefer recapitulation with more general remarks regarding the measurement and remediation of social competency deficits is offered as a concluding subsection of this summary section.

2. Eugene Area School Testing. Two junior high schools enrolling students principally from semi-rural communities near Eugene, Oregon, served as data sources for the initial project activities. Thirty-three teachers from these schools participated, first by nominating their more noticeably socially competent (NC) and socially incompetent (SI) students. From lists containing on the average somewhat over a hundred names of seventh and eighth graders, teachers in both schools averaged 17 NC and again 17 SI nominations, leaving approximately 80 names unchecked.

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[1] Excepting the review and further development of the Test of Social Inference, which is described in a separate supplement to this final report.

Though schools were found to be alike with respect to these averages, gross interteacher differences were noted within each school, teacher nominations varying from under five to over fifty percent.

Consensual student groups of 23 NC's, 67 SI's, and 59 SC's (the last, socially competent group identified by consensual non-nominations) were formed for further project study. The stability of these groupings was well supported by an examination of repeated teacher-nominations made one to two weeks later using a random sample of 12 teachers which revealed 88 percent identical renominations and no instances of reversed nominations.

Descriptions of student behaviors relating to the teachers' initial identifications of their students were collected one week after nominations from 25 of these teachers. Over 1200 different behavior statements were received, these eventually grouped under five major headings: Socialization Behaviors, Appearance and Hygiene, Academically Related Behaviors, Deportment, and more general Personal Traits or Qualities dealing with confidence, motivation, self-consciousness, etc.

Somewhat surprisingly NC, SC, and SI students all received about the same number (5 to 8) of descriptive statements. In both schools the most used behavior category for the NC students was Personal Qualities. School differences in describing SI students were noted, with teachers in the school enrolling students from the predominately blue collar neighborhood emphasizing deportment-related behaviors three to four times as much as did teachers from the lower income, more rural area school, the latter emphazing poor socialization behaviors. As expected, NC students received only positively worded descriptions, SI's only negatively worded statements, and the non-nominated SC students a mixture of both.

The consensual SC and SI samples were further described by their teachers using a modified Parker Social Incompetency Checklist (PSIC) consisting of over 200 non-positive behavior statements. Nearly half of these statements were paired in terms of "intentionality"--one item stating or implying the actor's purposiveness, such as, "deliberately annoys others", and its mate stating or implying inability, lack of skill, or ignorance, such as, "annoys others without meaning to do so". Each teacher completed a PSIC for six of his students, four of whom he had previously described on the behavior description task.

The number of PSIC items checked varied considerably for different teachers, ranging from less than 10 to just over 100, with an average of about 24 items checked. No differences were noted in number of items checked for students previously described on the free-response format and those described for the first time on the PSIC.

Interteacher agreement on the PSIC, examined by counting the number of items checked by different teachers describing the same student, proved to be generally high; percentages for various pairs of teachers

ranged from 73 to 92 percent, with a median value of 84 percent identical responses.

Comparisons made of their use of the intentional and unintentional PSIC items revealed that in neither school did teachers especially characterize either their SI or their SC students' negative behaviors as intentional rather than unintentional. Contrary to expectations, sex differences in ascribed intentionality were also found to be lacking.

To permit comparisons with the earlier free-response behavior descriptions, the PSIC items were categorized under the same five behavior headings used for the teacher descriptions. Approximately half of the PSIC items fell under the Deportment heading with another third under the Personal Qualities categories. For both their SC and SI students, teachers were found to follow these proportions in checking items, half of their checked items referring to Deportment and a third referring to Personal Qualities.

Pronounced differences in the use of the PSIC for SC and SI students were found to support the earlier teacher nominations. For all five behavior categories, at least twice as many PSIC items were checked for SI students as for SC students, these differences all significant at beyond the .01 level. However, considerable intrateacher variation within both SI and SC student groups was found, teachers varying considerably in the number of PSIC items they checked for different students whom they had previously identified the same way.

Between-school differences were also found, with the "blue collar school" teachers checking approximately twice as many PSIC items. Sex differences were noted too, with teachers checking nearly half again as many PSIC items for males as for females in both the SI and SC groups. More particularly, these sex differences may be summerized as girls in both groups receiving twice as many checks on poor sociability items as boys but boys receiving twice as many checks on the more numerous deportment items.

In summary, though both procedures provided data consistent with the much more global nominational distinctions of socially competent and incompetent students, teacher responses using the open-ended descriptions differed considerably from their responses using the behavior checklists. Other than to speculate on the more fatiguing and personally demanding free-response task, which commonly yielded five to eight behavior statements by a teacher about his student as contrasted with two to five times as many statements commonly checked, no explanation of these differences is apparent from the data. Quite clearly, the two different procedures for soliciting teacher descriptions lead to different emphases with respect to "kind" of student behavior described.

Following the teacher nominations and descriptions, four sets of experimental measures, each possibly related to social competence from

a different perspective, were administered to the consensually identified student. These were: (1) a measure of the student's social inferential ability, (2) measures of his knowledge of persons important to him and his judgment of their social relations, (3) measures of his home and out-of-school social activities based on a detailed self-report schedule, and (4) social, family, and school reports based upon home interviews parents and with the student himself. Because of the considerable testing time which would have been required for students to complete all tests, different subsamples of SI, SC, and NC students participated in the different testings. Eighty-seven students provided data for the first measure, 32 for the second, 67 for the third, and 34 students and their parents for the fourth. Student record data (CA, IQ, GPA, and absences) were also collected for these students, as were school counselor descriptions as to how these students were "getting along" academically, with their teachers, and with their peers. Family size, income, and education data were also obtained from slightly over half of the families of the consensual students.

The first experimental measure administered to the consensual sample was a modified, 26-item form of the Test of Social Inference (TSI) developed to assess effectiveness of a social perceptual training curriculum (Edmonson, et al., 1965). This objectively scored picture interpretation test measures the student's ability to make appropriate interpretations of social cues. A retest correlation of .83 based on a one week retest interval was obtained for a sample of 24 students, indicating considerable stability for the shortened form with this population, though scores did improve slightly upon retesting.

Comparisons of mean scores for SI, SC, and NC students yielded significant differences (at the .01 level) favoring the NC students over either the SI or SC students. Examination of individual student scores revealed only occasional SI students achieving TSI scores above the median score for the NC students and no NC students scoring below the median for the SI students. Separations between the SC students and other groups were less distinct.

Interpretations of the foregoing SI, SC, NC distinctions, with respect to TSI scores, however, become less clear upon examination of recorded intelligence test scores. The IQ means for the TSI samples of SI, SC, and NC students were 89, 101, and 114, respectively; the correlation between the TSI score and IQ was .59. Reanalysis of the TSI data using an analysis of covariance design with IQ as the covariate yielded non-significant differences between the TSI means for the SI, SC, and NC groups. Though the finding that SI students are less able to identify social cues (as measured by the TSI) than are their more socially competent classmates remains, interpretation is less clear in that it is possible to account for much of this deficit in terms of concomitantly lower IQ measures.

Data from student self-descriptions and estimates of how others described him based on a preliminary testing of 17 students suggested that (1) SI pupils more frequently described themselves as having negative and as not having positive behaviors than did SC pupils; (2) SI's and SC's were both better than 60 percent correct in estimating how their teachers described them; (3) both the SI's and the SC's predicted that their teachers would describe them much as they described themselves, an average agreement of 74 percent for the SI's and 87 percent for the SC's.

Expanded testing using modified recall population procedures (de Jun, 1967) examined the assumption that the extent of information students had regarding individuals important to them and their judgment of these persons' social behaviors would be related to their own social competence. After developing 12-person lists of names of persons important to them, students indicated how knowledgeable they were regarding the life history, preferences and beliefs of these persons. They further rated these persons' social behaviors in terms of fairness, dependability, dominance, and general interactions with others.

On all measures (three knowledge scores and four social relations scores), the SI groups scored lowest and, unexpectedly, the middle competency group, SC, the highest. All SI-SC differences and two of the SC-NC differences were significant at the .05 level or above. Inspection of the individual student scores revealed very little score overlap between the SI and SC groups.

These findings that low competency level students describe themselves as least knowledgeable about their important persons and also see them less favorably on all four social relations scales suggest, for the SI student, both poor information processing skills and poorer models for social relations. The extent to which these factors prescribe poorer interperson behaviors for the SI student or are the products of his incompetent social behaving, or again, are products of outside factors such as family environmental restrictions are questions not answerable from the present data.

The third set of experimental measures involved in-class administration of a modification of Edmonson's (1970) Social Activity Questionnaire (SAQ), which consisted of a series of questions to be answered by the student describing his home and outside-of-home activities. Three principal scores were derived from the SAQ: a home activities score (HA), defined as the number of the student's reported chores and recreational activities; an outside activities score (OA), defined as the number of different places visited, recreational events, etc.; and a level of responsibility score (LR), defined as the averaged weighting of the student's control and personal responsibility in deciding and/or conducting his outside-of-home activities. Readministration of the SAQ two days later indicated a very high stability for these scores; correlations all in the low ninety's or high eighty's were found.

On all three SAQ measures the SI group scored lowest, the NC group highest, and the SC just lower than the NC group. SI means were significantly lower than either the SC or NC group for the HA and LR scores (at the .01 and .05 levels, respectively) but not for the OA scores. No SC-NC differences were significant.

Descriptively, the data indicate that teacher-identified socially incompetent students report fewer home activities and less responsibility and initiative in their away-from-home situations than do teacher-identified socially competent students. The negligible, nonsignificant differences obtained for the OA scores suggest a more meaningful sub-breakout of this score in terms of leadership-follower or participant-spectator roles rather than frequencies of activities, this latter count being more affected by location of home (near or away from towns), family income, and the sex of the student.

The final set of experimental measures obtained from the Eugene area sample was based on individual parent and student interviews generally conducted in the students' homes. Because of time and cost considerations, only SI and NC students and parents were interviewed. The interviews, each lasting from one and a half to two hours, followed a schedule of open-ended questions designed to elicit statements as to how well the student was getting along with peers, with adults, with parents, with siblings, his general behavior with others, his personal grooming, how well he was getting along in school, and his independence from home.

Interviewer ratings based on SI and NC parent statements regarding each of these eight areas and on SI and NC student statements regarding these same eight areas were examined separately. For all 16 comparisons, the mean ratings of statements made by NC parents or students were higher (more positive) than were those from SI parents or students; all excepting the student reports of "independence from home" yielded significant t's at the .05 level or higher, confirming the expected negative relationship between social incompetency and the favorableness of reports of the various students' behaviors discussed in the interview. Examinations of individual interview ratings revealed only occasional instances of high ratings and not too many ratings of even "moderately well" for the SI student reports, with the reverse of nearly all "very well" or at least "moderately well" ratings for the NC student reports.

Similarity of reports by parents and sons or daughters were also examined. In all eight areas, nonsignificant differences were found for both the NC and SI parent-student pairings, indicating very similar reporting by both parents and students.

A "satisfaction" checklist completed by the informant was also used in the interview. Seven areas for possible student improvement were asked about: home behavior, school behavior, social relationships, attitudes and values, disposition, dependability, and goals for the future.

Table frequencies of these checklist responses revealed only four percent "needs improvement" checks by either NC or SI parents or students. This was particularly surprising from the SI parents and students in that both had just previously described their sons or daughters (or themselves) as poor or inadequate nearly 40 percent of the time in the eight reporting areas. Even the middle option of the scale, "generally satisfied but wants to see improvement", was used less than 50 percent of the time by parents of SI students and only a third of the time by the students themselves. Very high parent-student agreement was evident in all areas of the scale. Apparently, a willingness to negatively describe another's or one's own behavior does not obligate a conclusion of dissatisfaction or desire for change for many of the parents and students interviewed.

The school record information and counselor reports provided further SI, SC, NC descriptive data. Regarding sex, roughly a third more boys than girls were nominated SI, and the opposite, approximately half again as many girls were nominated NC as were boys.

Regarding IQ, nearly all of the low IQ (below 85) students are to be found in the SI sample, only seven are in the SC sample, and no student with an IQ below 100 is in the NC sample. Though students with IQ's above 114 are to be found in all three samples, they account for 41 percent of the NC students, 24 percent of the SC students and only 10 percent of the SI students.

With respect to school grades (GPA), 83 percent of the NC students, but not one SI student, had a GPA of 3.0 or above. On the other hand, 67 percent of the SI students, but not one NC student, had a GPA below 2.0. The SC students were a middle group, with 64 percent earning GPA's in the 2.0 to 2.99 range.

School absences again provided pronounced NC, SC, SI sample separations, with only one NC student having missed more than 14 school days as contrasted with 14 percent of the SC's and 39 percent of the SI's. At the high attendance end, approximately two-thirds of the NC's, half of the SC's, but only one in six of the SI's missed fewer than five days of school.

School counselors in both schools were interviewed using a general student description checklist form, and replies to the question, "How is the student getting along?", asked with respect to his academic work, his relations with other students, and his relations with his teachers were tallied as either "satisfactorily", "fairly well", or "poorly". These replies were much in agreement with the independently collected teacher descriptions. With only one exception, all the NC's were described as getting along satisfactorily in all three areas. "Satisfactorily" replies were nearly as frequent for the SC students but relatively infrequent (only one student in four) for the SI students. In describing SI student relations with other students and with teachers, counselors used the "poorly" response nearly a third of the time and 60 percent of the time in describing their academic work.

Replies on the socio-economic survey completed by the students' parents with respect to the number of family members at home, annual family incomes, and years of parents' formal schooling add further descriptive data for the SI, SC, NC study samples. Tallies of these replies reveal that family sizes were about the same for the three competency level groups, with roughly half of all families having either four or five at-home persons. Annual family income, however, varied considerably between groups, with an average reported income of nearly $10,000 for the NC families and below $6,000 for the SI families. One-fourth of the SI families reported incomes below $4,000, only one in twelve of the SC families, and none of the NC families. Only one SI family reported an income above $9,000, as contrasted with nearly a third of the SC families and nearly half of the NC families.

With respect to years of parents' schooling, aside from the common finding that two-thirds of the parents in all groups finished high school, SI-SC-NC differences again appeared, with only one SI family reporting continuing beyond high school compared to a third in the NC and SC groups. In contrast, a third of the SI families reported leaving school before high school, compared with half as many SI families and only one NC family.

Summarizing now the Eugene area sample data, a high degree of inter-teacher agreement and repeatability in separating the academically poor students from their average and above average classmates was found. The separation dimension given these teachers, however, was social incompetency. In further describing the "behaviors" of their selected students, the favored competent students received only positive descriptions principally dealing with their personal traits such as pleasant disposition (happy and smiling, etc.) sensitivity to others' feelings, and helpfulness and co-operation. The behavior focus of the teacher descriptions of the socially incompetent students differed for the two schools sampled, with one school emphasizing poor social relations to the near neglect of deportment and the second school quite the reverse. For neither the NC nor the SI students was academic functioning emphasized nearly as much as were social relations and deportment.

Considering the experimental measures obtained for the teacher-identified Eugene sample, without exception means for students identified as socially incompetent were lower on all the experimental tests, outside school activity reports, and home interview ratings than were means for their more favorably identified classmates. Distinctions between the SC and NC groups, though generally favoring the latter students, were not as clearly drawn. Considering first the experimental tests, the social inference measure revealed the SI student as less able to correctly interpret social cues, the information measures as describing himself as less knowledgeable concerning persons important to him, the social relations measures as viewing these persons as less favorably interacting with others. Together these measures suggest a deficit (as contrasted to his higher scoring classmates) in apprehending his social environment both in terms of content and support.

The non-school descriptions of the SAQ add to this deficit in terms of fewer home activities and less individual responsibility and initiative in the away-from-home activities for the teacher-identified social incompetent. The home interviews conducted with parents and the students themselves further enlarged upon this description by providing predominantly negative reports of the SI's relations with his peers, adults, parents, and siblings. Only for the latter two family persons were the behaviors of any of the NC students described as less than getting along "moderately well".

School achievement reports perhaps most widely separated the NC-SI interviewee groups, SI parents describing their son or daughter and SI students describing themselves as getting along less than satisfactorily in school. Only in terms of "satisfaction" were seeming inconsistencies in their data obtained; few SI students and fewer of their parents admitted to "needs much improvement". Expressed dissatisfaction apparently does not necessarily follow from admittedly unsatisfactory performance.

In the introductory section, the definition of social incompetency was considered in terms of a labeling response to a person's behaviors. It was further suggested that in part this definition resided in the values and concerns of the arbiter, i.e., who the judge was. In support of project emphasis on the school setting, the classroom teacher was selected as the central arbiter. His identifications were oriented toward school performance.

In both schools studied, poor school achievers crowded the incompetent nominee lists. Students from poorer homes and less well educated parents were also disproportionately represented. In writing behavioral descriptions about their SI's, teachers stressed deportment problems and poor social relations ahead of low academic achievement. Tests related to social comprehension and awareness discriminated "competent" from "incompetent" students. But differences between teacher nominees extended to their behaviors and activities outside of school as well. School counselors noted these students' poor peer and adult relations. So did their parents. So did the students themselves.

The data may generally be summarized as revealing an "incompetent syndrome" composed of unsubstantial school work, disruptive school behaviors, negative school and home environmental responses, poor social relations, deficient social understandings and awarenesses, and negative (deprecating) self-appraisal.

3. Portland School Testing. The experimental measures used in the Eugene area schools were revised and expanded for group testing in a Portland school sample comprised of the total eighth grade student populations in two elementary schools. Each school contained three eighth grade classes of approximately 28 students each, providing a total testing sample of 168 students. These two schools were located in predominatly

black sections of the city, one enrolling 98 percent and the second 75 percent black students. Extensive test data was collected in these schools, including experimental measures of students' social awareness, school attitudes, self-concept, and social relations with respect to various referent groups, repeated sets of daily classroom teacher ratings, student descriptions based on teacher and unit leader interviews, and school record data containing academic test scores and prior term teacher comments.

Generally, the Portland testing plan followed the earlier Eugene area test emphases. To start with, a social inference test for group administration was developed to measure the students' ability to interpret social situations. This Picture Interpretation Test (PIT) involved a multiple choice format using a set of 14 pictures of social activities requiring student interpretation.

A second test used a partially experimenter-supplied, partially student-supplied listing of peers and adults known to that student. Student ratings of how well they (the students) get along with their listed persons were obtained. Teachers made similar ratings of their students. Student estimates of how these listed persons, including their teachers, rated them were also obtained. These rating and estimating procedures provided a number of measures of social relationships--how the students perceived themselves as relating to various groups of other persons (classmates, other similar age acquaintances, school adults, other adults they had listed), how they believed these other persons considered them, how their classmates and teachers rated their social interactions, and how aware they were as to how others rated them.

Two further experimental instruments involving student self-descriptions were a Student Appraisal Inventory (SAI) developed by the UCLA Center for the Study of Evaluation, Instructional Objectives Exchange (1970) and a Pupil Opinion Questionnaire (POQ) developed by Kansas City Youth Development Project (Glick, 1967). The SAI essentially focuses on the student's self-concept and contains 80 fairly direct statements divided into four subscales, one pertaining to family interactions, a second to peer relations, a third to scholastic efforts, and a fourth to more general self-esteem. The POQ is a 60-item Likert scale with four subscales of 15 items designed to measure attitudes toward four aspects of the school experience, teachers, school in general, school work, and peers.

As for the Eugene area samples, data was abstracted from the student school records to provide a broader base for describing the student's background and school behavior. These data included age, IQ, SCAT scores, Metropolitan Reading score, previous and current absences, medical history, number of siblings, and former teacher comments regarding school work, social adjustment with peers, and behavior problems. These three sets of teacher comments were coded using a four category code. Medical history was not used because of its very limited information.

A major data addition for the Portland sample was the daily teachers' ratings of their students' class preparation, contribution, and disruptive behaviors. Later interviews with home room teachers and with unit leaders concerning their students' social behaviors provided more summative student behavior descriptions. This interview data was subsequently used to categorize students along a seven-point continuum of behavior problem severity. Individual home interviews with parents and students were not conducted for the Portland sample, principally because of the time and cost limitations.

The PIT, student ratings and estimates, SAI, and POQ were twice administered, late in September and again in December eleven weeks later. The daily classroom ratings were made for three five-day periods, the week of pre-testing, one to three weeks preceding second testing and again in early February. The school record data was principally examined during the fall. Data from the end of term (May) records were found to be too non-discriminating and incomplete to be included in the study.

Initial and subsequent test scores on all experimental measures including the teacher ratings were examined for consistency over the eleven week retest interval. Though minor differences were noted between the initial and retest means, the retest correlation coefficients proved generally unsatisfactory, ranging from a low of .28 for the PIT to .77 for estimations of ratings from peers. Most coef' ients were in the .50's and .60's.

In the absence of apparent differences between the first and retest scores and to increase the stability of individual scores, initial and retest scores for all experimental measures were combined into simple composite scores.

Further data reductions, principally a combination of the highly correlated class contribution and class preparation ratings into a single "classwork" rating and combinations involving enlarging the rating or estimating subgroups into larger groups (such as combining ratings of same sex peers from each of three other eighth grades into one rating of same sex peers) resulted in 45 retained variables.

Three analyses were made of the retained variables, a series of single-variable examinations of score differences between "high" and "low" behavior problem students, an exploration of canonical relationships among selected subgroups of variables, and a principal factor analysis of 37 variables. Though computationally interrelated, these three analyses each probed the question of definition and measurement of social incompetency of junior high school age adolescents somewhat differently.

The first analysis consisted of comparisons of students dichotomized as high or low behavior problem (BP) students on the basis of their teachers' and unit leaders' interview-based descriptions of their school behaviors. Sixty-nine students were classified as low BP, 55 high BP, and 24 in an "in between" category. This middle category was not used in this first analysis. Comparisons were made in terms of group means, yielding significant t's for 19 of the 45 retained variables.

No differences between the high and low BP groups were found with respect to age, sex, or race composition, months enrolled in present elementary school, or absences in primary grades. Significant differences (at the .01 level) were obtained for both seventh and eighth grade absences, however. Inspection of absences since primary grades revealed a steadily decreasing percentage of low BP students and a correspondingly increasing percentage of high BP students with high absence rates.

Though no differences between the high and low BP groups were found for the academically related test scores (IQ; verbal, quantitative, and total SCAT scores; Metropolitan Reading score), significant differences (at or beyond the .05 level) were obtained for the two academically related teacher descriptions, i.e., comments regarding the student's schoolwork by former teachers and current teacher daily ratings. In considering these academic measures, it should be noted that the average recorded IQ (Kuhlmann-Anderson) for these Portland students was 91 and that on all test measures, the sample students were roughly a full standard deviation below the average of Portland eighth graders.

Low BP students typically scored higher than high BP students on all the eight self-description variables (the four SAI and four POQ subtest scores). Five of the eight comparisons yielded significant t's. These were the POQ self-esteem measure relating to scholastic achievement and the four SAI attitude scales having to do with four aspects of school experience: teachers, school, schoolwork, and peers.

Examination of individual student scores on these measures further emphasized these differences between teacher-unit leader-identified high behavior problem students and their less serious problem classmates, with relatively few high BP students expressing positive school-related attitudes and relatively few low BP students expressing negative school-related attitudes.

Of the 45 retained variables, 17 shared a common general focus of social relations. Those five variables in this grouping derived from teacher comments or ratings all yielded significant t's; only two of the remaining twelve variables derived from ratings and estimates of various peer and adult subgroups achieved significance. While few low BP's received negative descriptions from their teachers (present or past) and few high BP's received other than negative teacher descriptions, social relations ratings from or of peers or estimates of these ratings generally were high or low independent of the students' behavior problem classfication. The similarity between distributions of former teacher behavior comments and current teacher behavior ratings suggests persisting social behavior problems for many BP students.

The last grouping of retained variables includes four measures relating to social awareness, the PIT score and three accuracy scores based on the students' correctness in estimating ratings being made of them by same sex peers, by opposite sex peers, and by their classroom teachers. Excepting accuracy in estimating ratings from opposite sex peers, comparisons of "awareness" means for high and low BP students all yielded significant $\underline{t}$'s (at the .01 level). Though the more extreme behavior problem students did reveal less social awareness (in the sense of the PIT and rating estimate procedures used in this study), interpretation as to whether this deficit contributed to the student's behavior problems would be entirely conjectural from these data. This limited noncausal interpretation is, of course, similarly applicable to the all 19 significant $\underline{t}$'s obtained for these high BP-low BP comparisons.

Though inspection of the matrix of intercorrelations of these foregoing variables indicated general independence among all except subtest scores for the same test, multivariate analyses were made of this data to statistically determine data reduction possibilities. In considering the matrix of intercorrelations, one question of particular interest was that of extent of overlap between subsets of variables. The problem of maximazing the relationship between two subsets of variables is resolvable by canonical correlation procedures. In particular, the question answered by the canonical R is how much of the variance of two linear composites is shared.

Stewart and Love's procedures (1968) emphasizing the concept of redundancy (analogous to correlation) was generally followed in examining the relationship among pairs of each of seven subsets of two to five variables. These subsets of variates were each selected as forming somewhat intradependent measures. These were: (1) current teacher descriptions, including the interview-based rating of behavior problem severity used as the focal variable in the preceding single variable analyses, (2) earlier teacher commentary in school records, (3) subtests of the SAI, (4) subtests of the POQ, (5) student ratings of how well he gets along with others, (6) estimates of how others rated him, and (7) ratings actually received from other eighth graders.

In the exploratory context of the present analysis, the redundancy measures contain perhaps the most revealing summary of the analysis. In effect these redundancy measures describe the percent of the variance of one set of variables predicted by the variance of a second set of variables. Excepting only the paired set of student ratings and estimates, the obtained redundancy values for all other canonical pairs of variables were at maximum 24 and 19 percent and generally even much lower.

The conclusion for these near-zero redundancy pairings is one of non-relatedness among the sets in the sense of overlapping information. Of the several sets of variables, only the student ratings and their

estimates of ratings made of them are interpredictable. The extreme independence among the various sets strongly suggests lack of simplified factor structure for the several variables studied.

This prediction was borne out by the principal component analysis conducted for 37[1] of the initially retained 45 variables. Computationally, this analysis proceeds from a matrix of intercorrelations to develop a factor structure accounting for a maximum amount of the total variance with the fewest number of factors.

Essentially, the question asked through this procedure was, "How are the various experimental measures of the student's academic achievement, teacher interaction, deportment, self-appraisal, school attitude, social relations, and social awareness organized?" In other words, "What is the factorial structure of these many student description variables?" In the analyses followed, factors with eigenvalues greater than unity were rotated by normalized varimax procedures to simplify interpretations of factors. Ten factors were extracted representing 74 percent of the variance.

Most of the ten factors are identified by two or three high loading variables with relatively little additional loading from variables common to more than one factor. The first factor, accounting for 19 percent of the total variance of the 37 variables, consisted largely of the peer social relations measures, in particular, ratings made by 8th graders of how well they get along with other 8th graders of same and opposite sex and estimates they made of how these other 8th graders rated them.

The largest loadings on the second factor were for those variables based on current teacher behavior ratings and descriptions of their students' in-class disruptiveness, general behavior problems, and teacher-student relationships. This second factor accounts for 13 percent of the variance.

The four subtest scores from the Pupil Opinion Questionnaire band together to form the third factor, a self-description of the student's school environment, and accounts for 8 percent of the variance.

The fourth factor, accounting for 8 percent of the variance, principally consists of student social relations ratings, estimates, and accuracy measures all involving recalled persons, that is, adult and peer persons personally known to the student and added by him to his rating and estimating list. Apparently, ratings and estimates made

[1] IQ available for only 52 students, subtest SCAT scores, prior term attendances, number of siblings, and CA were eliminated.

of these recalled persons are factorially distinct from ratings and estimates made of school adults and other 8th graders.

As with Factor 3, Factor 5 involved only subtests from a single student description instrument, the Self Appraisal Inventory. This self appraisal factor accounts for 6 percent of the variance.

Three of the five variables with non-trivial (>.30) loadings on Factor 6, are derived from teacher commentaries regarding their students' social and school behaviors in earlier years. The remaining two variables are current teacher descriptions. The distinctness of this factor appears to be continuing or persisting adjustment problems in the school setting rather than the more current focus of Factor 2. This prior teacher report factor accounts for 5 percent of the variance.

Factor 7, though accounting for only 5 percent of the variance, is especially interesting in that it has a positive high loading from race (non-black coded high) and high negative loadings from ratings received from other 8th graders of both sexes. Apparently this factor reflects problems in minority race relations, the less than 25 percent of non-black students receiving and expecting to receive lower social relations ratings from the other 8th graders.

Factor 8 is clearly academic achievement oriented, with major loadings from the SCAT total score and the Metropolitan Reading Test score and a further substantial loading from the teacher comments regarding previous terms' schoolwork. The Picture Interpretation Test score and the three measures of accuracy of estimation of adult and peer social relations ratings of oneself together comprise Factor 9, social awareness.

The only variable with a high loading on the final factor is sex (males coded 1, females 0). The two other variables identifying this maleness factor are expected social relations ratings from opposite sex 8th graders and accuracy in making these same opposite sex estimates. Both have moderate to low negative loadings. The last three factors accounted for only 4, 3, and 3 percent of the variance, respectively.

The foregoing ten factors document a general independence among the different small subsets of test scores, ratings, and reports. Though the analysis was instructive in identifying some unsuspected groupings or dimensions such as social awareness, social relations with "recalled persons" as separate from those involving school peers and adults, distinguishing between present and prior term teacher descriptions, a minority race factor, and sex as a separable (though unclear) focus, the major finding was one of multidimensionality of the various measures taken of student social and school behaviors, attitudes, and skills collectively obtained in examining social incompetency of junior high school students.

The minimal redundancies revealed by the canonical correlation analyses preview this conclusion. The several significant mean differences obtained for the student descriptor variables between 8th graders identified as high and as low behavior problem students perhaps requires further

interpretation given the results of the factor analysis. Evidently, these differences in means apply to different students. For example, a sufficient number of low behavior problem students may have had relatively high accuracy scores (resulting in a significant mean difference) and a sufficient number of low behavior students may have had relatively high school work ratings (resulting in another significant mean difference) but only some of the same low behavior problems would be found in both high scoring groups. In effect, continuing with this simplified example, the data do not permit describing the low behavior problem student as both high in accuracy and receiving high schoolwork ratings. The group means are both high but the variables are not highly correlated and are factorially distinct.

The exploration of two possibilities for educational units which might lead to larger curricula for the remediation of social competency deficits of 8th graders involved trial administrations in two of the Portland 8th grade classes. The units were developed in close collaboration with teachers from these and other junior high schools and were designed to be run as part of regular social studies classes and to require one to two hours per afternoon. The units were to be conducted during the eleven week pre- and post-testing interval described in the previous subsections, these experimental test measures to be used for assessing the effectiveness of the units.

The first unit was a ten week in-class organization of small student coops to produce a simple craft article for sale. The unit's activities were designed to involve the students in making group decisions and analyzing how well they were doing. The unit focus was group cooperation and working with other persons. This emphasis was well supported by consulting school personnel as a social competency clearly lacking in both schools.

Though it was initially intended to trial run the same educational unit in both schools, the different racial composition and related problems of interracial tensions in the second school led to major revisions. The first unit's emphasis on group functioning skills was expanded to include focus on improved social understandings and interperson behavior through personal involvement in dramatization. A unit outline calling for an eight week student planning and production of videotape vignettes based on experiences the students have had was prepared. Scenes were to be of various kinds of social relationships, conflicts, problems, and resolutions, etc. that students had come across. The planning, enacting, and editing were to be the responsibility of small student groups, thus requiring interdependability for successful production.

Both experimental units began immediately after the first testing period. An assistant teacher was assigned to each unit. Though both units started well, with enthusiastic student interest and support,

neither followed the prepared unit outline nor was able to sustain class involvement. One serious problem was extensive student absence, averaging around six a day from each class. The absence of a key participant in a small group often caused the group activities to be suspended. For example, in the videotape unit, missing individuals meant delays in using the filming studios. School field trips caused further interruptions.

A problem unique to the cooperative production unit was the students' determined selection of candlemaking as their production task and a subsequent individualization rather than group sponsorship and control of student effort. Vandalism, wrecking the candlemaking equipment as well as individual candles, also disrupted the unit.

In both units it became obvious that a more tightly structured program of activities and of alternative, ready-to-go activities was needed to maintain the fast pace required for sustained student involvement. The teachers and assistants simply had insufficient time to amplify the outline presented them. Particularly, more specific exercises in group decision making, including practice assignments, were needed if the small groups were to develop and function collectively. Pre-unit special teacher and aide training in group discussions techniques might be required.

Because of the several disrupting problems during the unit trials, neither unit was formally assessed in terms of the experimental test data. The focus and proposed plans for conducting the educational units had been well received in both schools. They failed to function in either classroom. Unit revision, including increased structuring of activities, specificity of alternatives to meet situational problems (such as absences), and perhaps student pre-unit exercises in discussion skills are needed before a retrial of these units may be recommended.

B. Measurement of Social Incompetency (Recapitulation and General Remarks)

Social incompetency is a term of convenience for some subset of loosely defined behaviors, in effect, a label supplied by one or several judges identifying persons whose actions are inappropriate or unacceptable by their standards. More briefly, social incompetency involves a judgment about behavior.

The project started with an examination of the social competency-incompetency judgments of teachers with respect to some 600 7th and 8th grade students in two junior high schools. They labeled, then wrote behavior descriptions, then completed a behavior checklist for these students. Though the number of behavior descriptions written per student per teacher was roughly the same across students, much more inter- and intra-teacher variability was introduced by using the behavior checklist.

But of greater concern in considering the checklist as an exploratory instrument for examining arbiter judgments was the finding that proportions

of teacher-checked items in the various behavior categories tended to follow the proportional distribution of these items in the checklist. Though both procedures support the earlier, more global nominational distinctions of socially competent and incompetent students made by their teachers, and though the checklist is to be preferred as both administratively and scorably much more accommodating than the free-response procedures, the apparent interactive effect of item content upon teacher response requires multiple procedures.

Following their teacher nominations and descriptions, four sets of experimental measures, each possibly related to "social competence" from a different perspective were administered to samples of consensually identified students. These were: (1) a measure of the student's social inferential ability, (2) measures of his knowledge of persons important to him and his judgment of their social relations, (3) measures of his home and out-of-school social activities based on a detailed self-report schedule, and (4) social, family, and school reports based upon home interviews with parents and with the student himself. Means for students identified as socially incompetent were lower on all the experimental tests, outside school activity reports, and home interview ratings than were means for their more favorably identified classmates. Distinctions between the SC and NC groups, though generally favoring the latter students, were not as clearly drawn. Because of the few students receiving more than one or two of the measures, multivariate analyses of these data were not possible.

These experimental measures were revised and expanded for group testing of 168 eighth graders in two Portland elementary schools enrolling students from a predominantly black section of the city. The test data collected in these schools included experimental measures of students' social awareness, school attitudes, self-concept, social relations with respect to various referent groups, repeated sets of daily classroom teacher ratings, teacher and unit leader interview-based student behavior descriptions, and school record data containing academic test scores and prior term teacher comments.

Excepting moderately high within-instrument subtest relationships, intercorrelations among the 45 variables derived from these data were generally near zero. The extent of overlap between subsets of these variables was examined in terms of canonical correlations. The obtained near zero redundancies, indicating non-relatedness in the sense of overlapping information among the several variable sets, suggested a lack of simplified factor structure. This expectation was confirmed in terms of a ten factor solution provided by a principal components analysis. The ten factors were (1) self-descriptions of social relations, (2) current teacher ratings of behavior, (3) self-descriptions of school environment, (4) self-descriptions of social relations with recall persons, (5) self-appraisals regarding school and family, (6) behavior reports by former teachers, (7) minority race problems (not being black),

(8) academic achievement, (9) social awareness, (10) maleness. These generally distinct factors document a general ind pendence among the different subsets of test scores, ratings, and self and teacher reports.

The central project task was measurement of social incompetency. The focal setting was the junior high school. In commission of this task, teachers' in-use definitions of social incompetency were extensively examined. Interviews were conducted with numerous school and lay persons and with parents and students. A number of experimental measures conceptually related to social incompetency were devised and administered. Other already existing experimental measures were adapted for project use. The testing samples were 159 seventh and eighth graders in white semi-rural junior high schools and 168 eighth graders from predominantly black elementary schools.

The most prominent conclusion to be drawn from the extensive test data is the multidimensionality of the domain tested. Social incompetency is simply not definable as a particular co-related set of non-desired behaviors. The appellation of social incompetency may be earned by display of any of a host of independent skill deficiencies or detrimental actions. Though group scores on various measures of socialization, school achievement, classroom behavior, and attitudes toward school and self are likely to be poor for groups of persons identified as less socially competent, many of the individual members of these groups may be expected to earn above average scores on these measures. And persons earning poorer scores on one social competency measure well may not earn lower scores on a second or third competency measure.

A further general project conclusion derives from considerations of the arbiter role in defining social incompetency. The arbiter, be he teacher or civic appointee or a lay observer, is an active participant in defining incompetency. He is more than a processor of behavioral data regarding another person. He affects that data as he processes it. First, he is a value selector, choosing the criteria for consideration. This is especially true where the general classification notations are as situationally broad and behaviorally non-specific as in considering social competency. Second, he is an evaluator deciding on the standards, the reference points or cut-off behaviors which determine, in this instance, competence or incompetence. And, or course, he is always an imperfect processor of data, failing to recall or include all of it, unintentionally (independent of his biases known or unknown) over or under weighting parts of it, being affected by logically irrelevant factors such as recency, personal fatigue, politics, etc.

The foregoing is a rational argument and implies more serious inter-arbiter disagreement than was realized in the present project. The answer lies not in the fact that our different arbiters (teachers) were judging

in similar settings or that they represented similar backgrounds and professional responsibilities--these congruences apparently helped little--but rather in the consensual identification of SI's, SC's, and NC's and in our principally considering group data. Though most student names had appeared on six or seven teacher nominating lists (less than nine percent on fewer than five teacher nominating lists), only very few (18 out of 603 students) received all SI or NC nominations from all of their teachers and only 80 (13 percent) received SI or NC nominations from more than three of their teachers.[1]

In identifying competent or incompetent persons, then, individual arbiter idiosyncrasy needs to be taken into account, as indeed does the effect of method upon his response (as illustrated by the finding that proportions of checklist responses followed the proportions presented in the checklist). These both are problems to be prepared for, perhaps reduced by arbiter training, but surely not ignored, as too often seems to have been the case in earlier writing.

In summing project results, a major product is the set of experimental tests developed and trial tested and the additional already existing experimental tests adapted for use in the project testing program. Aside from the extensive social competency behavior checklist (PSIC), these tests include group measurers for describing student social relations (in terms of how he regards others, how he is regarded by others, his apperceptions of how he is regarded by others, and his accuracy in stating these expectations), his social inferential skills, his information regarding others, his school attitudes, and his self-concept as a student. In addition, classroom teacher rating formats and home interview schedules were developed and successfully used. Though perhaps requiring specific modifications for particular investigator needs, these several measurement procedures should be of use for further studies in the general domain of student adaptiveness and social relationships.

The compiling and summarization of the extensive Test of Social Inference data from intersectional samples of educable mentally retarded adolescents is to be noted as a further completed project task. This review[2] documents the serviceability of the TSI as a widely tested and psychometrically sound instrument for assessing inferential skills of retardates. The alternate short forms developed for the TSI should add to its usefulness in the field.

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[1]This is not counting the 129 student names (21 percent) consistently not nominated by any of their teachers.

[2]Reported as a separate addendum to this final report.

Less successful was the final project effort in developing remedial educational units. Whether or not the proposed unit activities might succeed in their objectives of increasing group cooperativeness and social acceptance under improved trial conditions remains to be demonstrated. Recommendations for these improvements are included in the project report.

What remains to be done for the school (and society) to more adequately respond to the problem student is, of course, much more extensive than even suggested by the several project activities described in this report. It is, however, hoped that the detailed account of these activities furnished in the preceding several sections will be of use to future investigators and program planners to develop strategies for that response.

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APPENDIX A

LISTING OF TEACHER DESCRIPTIONS[1] AND FREQUENCIES WITH WHICH THEY WERE USED TO DESCRIBE SOCIALLY INCOMPETENT, SOCIALLY COMPETENT, AND NOTICEABLY SOCIALLY COMPETENT STUDENTS

Category and Statement	School C			School F		
	SI	SC	NC	SI	SC	NC
Number of Students Described:	32	24	15	24	25	10
Number of Student Descriptions:	52	42	15	37	46	10
Sociability						
1. Poor peer relationships.	53			52	4	
2. Good relationships with some peers only.	1	11			7	
3. Good peer relationships.		36	20		40	17
4. Immature relationship with opposite sex.	2					
5. Maturing relationship with opposite sex.		1	1			
6. Poor relationships with teachers and other adults.	4			13		
7. Good relationships with teachers and other adults.		11	6		20	8
Appearance, Hygiene and Health						
8. Unattractive physical appearance.	17			11		
9. Reasonably well-dressed and groomed.		2			3	
10. Attractive physical appearance.		2	3			2
11. Defective, obtrusive or hard-to-understand speech.	7					
12. Pleasing voice.			1			
13. Poor health; physically weak.	2			1		
14. Gross to fine motor skills very limited.	1					
15. Good motor coordination.			1			

[1]For convenience in reporting, the 1258 individual teacher description statements were grouped into 80 statements.

Appendix A Continued

Category and Statement	School C			School F		
	SI	SC	NC	SI	SC	NC
Academic						
16. Inadequate class participation.	19	2		14	1	
17. Good class participation.		2	8		4	
18. Inability or unwillingness to complete assignments.	43	8		1		
19. Underachievement; does only enough to get by.	13	11		5		
20. Good worker, perseveres; completes assignments.		12	14	1	26	2
21. Poor academic work.	17	6		9	4	
22. Improvement in study habits and achievement.		2				
23. Successful academically despite poor attitude.		2				
24. Average student.		6				
25. Above average academic work.		5	3		5	5
26. Refuses or does not seek help with schoolwork.	4	1				
27. Seeks help when needed.			1		1	
28. Forgets to bring class materials.	7					
Department						
29. Socially disapproved behaviors (obscenity, drug use, sexual freedom, theft, smoking, etc.)	13	3		1		
30. Frequent fights or arguments.	6			6		
31. Rude, negative remarks and gestures; purposefully causes trouble to others.	10	1		3	3	
32. Destructive of school's and others' property.	2					
33. Class disruption (wild physical displays and aggression, temper tantrums, practical jokes, teasing others, talking, running around, etc.)	33	12		4	3	
34. Seldom or never disrupts class.	1	8				
35. Avoids work by scheming behavior.	8	4				
36. Cheats.	2					
37. Rejects all authority.	26					
38. Poor attendance.	15			3	1	
39. Good attendance.		2			1	

Appendix A continued

Category and Statement	School C			School F		
	SI	SC	NC	SI	SC	NC
Personal Traits						
40. Generally unpleasant disposition (moody, sullen, hostile, etc.)	2	4		6		
41. Generally pleasant disposition (happy and smiling, outgoing and enthusiastic, etc.)		21	15		15	9
42. Quiet, shy; passive, withdrawn, isolated.	22	7		6	14	
43. Neither withdrawn nor over-aggressive.		3				
44. Insecure and lacking in self-confidence.	14	4		15	5	
45. Not over-confident, affected, or conceited.		1	3			1
46. Secure and self-confident.		11	1		3	6
47. Adaptable; can adjust to varied settings and circumstances.		1	2		7	3
48. Immature.		2		4	2	
49. Mature or improving in maturity.		2			1	3
50. Not responsible or dependable.	1	4		4		
51. Responsible, dependable, honest.		1	5		6	3
52. Rude and disrespectful.	1			16	1	
53. Sensitive to others' needs and feelings.			3		10	8
54. Shows self-discipline and self-control.		2	4			
55. Lacks self-discipline and self-control.	5	1				
56. Reacts badly to criticism or pressure (sulks, blames others, etc.)	6	2				
57. Adapts well to criticism and frustration.		3	6			
58. No motivation or initiative.	8	4		4		
59. Strives for perfection in self and others.		7	3	1	7	
60. Nervous, worries about small things.	3			1		
61. Easy-going, not demanding; happy-go-lucky.		1			1	
62. Narrow range of interests.				1	1	
63. Varied interests.					3	2
64. Naive and inexperienced.				3	1	
65. Independent thinker, individualist, imaginative.		1	6		3	1
66. Not very imaginative.					1	

Appendix A continued

Category and Statement	School C			School F		
	SI	SC	NC	SI	SC	NC
67. Stubborn and rebellio .	2				1	
68. Helpful and cooperative.		3	6	1	6	4
69. Competitive; wants to be center of attention.	1	2		1		
70. Selfish, does not share.	3	2				
71. Lacks leadership qualities.		5		1	3	
72. Has leadership qualities.		2	4		2	2
73. Negative attitude toward school.	4	1				
74. Positive attitude toward school.		5	2			
75. Little or no participation in extra-curricular activities, athletics.	2			2		
76. Takes part in extra-curricular activities, athletics.	3		6		4	2
77. Has a job, home responsibilities.		3				1
78. Poor family background.	1			1		
79. Good family background.			1		1	
80. Feels guilty and apologizes for disruptive behavior.	1	1				

APPENDIX B

FREQUENCIES OF 212 PARKER SOCIAL INCOMPETENCY CHECKLIST ITEMS CHECKED BY TEACHERS FOR STUDENTS IDENTIFIED BY THEM AS SOCIALLY INCOMPETENT AND SOCIALLY COMPETENT

Item	(Items with largest SI-SC usage differences are listed first.)	Frequency SI (N=68)	Frequency SC (N=78)
20.	Demonstrates he cannot apply himself to the task at hand.	33	5
23.	Will not apply himself to the task at hand.	34	8
53.	Appears unable to make friends.	29	5
33.	Chooses to ignore regulations.	28	8
76.	Shifts from one activity to another without completing either.	25	8
103.	Cannot avoid producing "sloppy" work.	22	5
60.	Responds to teasing with angry verbal behavior.	21	4
3.	Deliberately wastes time.	33	17
48.	Shows inability to organize time adequately.	32	16
38.	Shows he has not learned to speak before a group.	18	2
11.	Is distracted from the task at hand by ordinary events, such as minor noises, movements, etc.	36	21
18.	Deliberately annoys others.	26	12
133.	Will not ask for directions to be repeated even when it is obvious he does not understand them.	22	8
27.	Appears unable to cooperate with others.	15	1
22.	Cannot initiate his own activities.	24	11
101.	Pouts, sulks.	22	9
7.	Displays poor coordination in physical activities.	17	4
149.	Exhibits restlessness and shifting body positions.	20	8
97.	Chooses to ignore regular routines.	18	6
160.	Exhibits an inability to ask for directions to be repeated even when it is obvious he does not understand them.	16	4
129.	Avoids mixed-sex company.	16	5
44.	Refuses to respond to questions.	13	2
39.	Does not admit he is wrong because he does not realize it.	22	12
111.	Starts fights without meaning to do so.	11	0
41.	Will not concentrate on a given task when asked to do so.	25	15

Appendix B continued

Item		Frequency SI (N=68)	Frequency SC (N=78)
87.	Forgets.	24	14
26.	Won't admit when he is mistaken or wrong.	22	12
57.	Will not persist at activity when he fails or loses at that activity.	20	10
67.	Acts in a listless fashion, lacks energy.	20	9
5.	Talks out of turn without meaning to do so.	19	9
25.	Shows he has not learned to conform to regulations.	18	8
141.	Chooses not to complete tasks or activity attempted.	18	8
50.	Demonstrates he does not know how to participate in group activities.	17	7
54.	Cannot express himself in writing.	16	5
121.	Withdraws when teased by others.	15	5
164.	Deliberately ignores reprimands.	15	5
31.	Refuses to speak before a group.	12	2
21.	Fails to demonstrate he has learned to read.	11	1
32.	Refuses to participate in group activities.	11	0
45.	Shows he does not know how to behave in polite and sociable manner.	11	1
166.	Begins to do things before instructions are completed.	7	17
142.	Gives excuses for not getting work finished on time.	23	14
163.	Withdraws from demanding situations.	23	14
16.	Refuses to cooperate with others.	21	12
157.	Deliberately ignores warnings to change his ways.	19	10
191.	Laughs inappropriately.	15	6
65.	Is deliberately inactive.	14	5
107.	Over-reacts when things do not go his way.	14	5
108.	Unintentionally works slowly.	14	5
63.	Complains of a variety of physical ailments such as: cramps, aches, pains, poor health.	11	2
93.	Complains that others discriminate against him.	11	2
192.	Deliberately avoids conversing with others.	9	0
128.	Shows interest in a narrow range of activities.	19	11
52.	Cannot concentrate on tasks when asked to do so.	16	8
15.	Chooses not to follow rules of games.	13	5
156.	Reacts in an overly-sensitive fashion.	12	4
72.	Insists on having the last word.	11	3
206.	Requests praise or approval for tasks attempted.	11	3
85.	Complains about imaginary physical ailments.	9	1
214.	Seems unable to keep himself clean.	8	0

Appendix B continued

Item		Frequency SI (N=68)	SC (N=78)
116.	Unintentionally produces inaccurate work.	24	17
155.	Daydreams.	24	17
113.	Comments that he hates school work.	23	16
119.	Demands attention.	19	12
4.	Without meaning to, fails to obey commands or directives.	16	9
14.	Demonstrates he cannot maintain an activity when he fails or loses at that activity.	14	7
150.	Jabs others with potentially dangerous objects: pencils, sticks, rulers, compasses, etc.	12	5
94.	Refuses to talk.	11	4
43.	Deliberately disobeys commands or directives.	10	11
182.	Unintentionally ignores regular routines.	8	1
185.	Does not converse with others because he does not know how.	8	1
114.	Comments that nobody likes him.	7	0
24.	Annoys others without meaning to do so.	17	11
73.	Complains that others are unfair.	15	9
173.	Intentionally interrupts others while they are working.	15	9
190.	Exhibits temper outbursts.	15	9
201.	Tells lies.	13	7
196.	Is inactive without intent.	12	6
19.	Indicates he does not know how to respond to questions from others.	10	4
82.	Unintentionally distorts the truth.	10	4
169.	Makes obscene or lewd gestures.	10	4
8.	Refuses to read although able to do so.	8	2
219.	Goes through others' possessions without authority.	8	2
47.	Will not communicate in writing.	7	1
174.	Fails to wear clean clothing on own initiative.	7	1
117.	Unintentionally fails to share that which he is expected to share.	6	0
195.	Shows inability to wear an appropriate hair style.	6	0
92.	Becomes upset when thwarted.	15	10
170.	Deliberately talks too loud.	12	7
193.	Exhibits aggressive behavior: biting, kicking, punching, throwing objects.	12	6
62.	Is deliberately unmannerly: for example, talks too closely, burps, yawns at others.	9	4
56.	Unintentionally uses obscenities in speech.	8	3
148.	Arrives late, on purpose.	8	3
144.	Reacts with fear in a variety of everyday situations.	6	1
181.	Unintentionally arrives late.	6	1
51.	Rejects attempts of others to be friends with him.	5	0

Appendix B continued

Item		Frequency SI (N=68)	Frequency SC (N=78)
165.	States that others are to blame for his actions.	17	12
42.	Willfully makes loud verbal outbursts at inappropriate times.	19	15
215.	Grumbles or gripes about having to do work.	21	17
118.	Shows he has not learned to respond to reprimands.	15	11
167.	Spends time watching others.	15	11
77.	Slouches unintentionally.	13	9
216.	Is embarrassed when attention is directed towards him.	12	8
211.	Repeats identical response in a variety of situations.	11	7
84.	Fails through lack of understanding to heed warnings to change his ways.	10	6
106.	Refers to himself as dumb or stupid.	10	6
123.	Shouts back when corrected.	10	6
17.	Deliberately damages others' property or possessions.	9	5
131.	Tries to hurt others' feelings.	9	5
13.	Demonstrates he does not know how to follow rules of games.	8	4
179.	Is unintentionally unmannerly.	8	4
137.	Protests about changes in his routine.	7	3
29.	Unintentionally ruins own property or possessions.	6	2
69.	Giggles hysterically.	6	2
217.	Deliberately damages public property.	6	2
71.	Talks to himself.	5	1
99.	Refuses to share.	5	1
158.	Unintentionally ignores warning of danger.	5	1
194.	Unknowingly wears inappropriate clothing.	5	1
213.	Picks nose.	5	1
66.	Comments that he hates to be told what to do.	4	8
125.	Destroys or takes apart something he has made rather than showing it or asking to have it displayed.	4	0
135.	Cusses or swears without meaning to offend.	4	0
202.	Chooses to wear inappropriate clothing.	5	1
204.	Appears bored by most assignments.	17	14
37.	Refuses to initiate his own activities.	15	12
120.	When presented with a task, withdraws from the situation.	15	12
39.	Reads while others engage in more active pursuits.	11	8

Appendix C continued

Item		Frequency SI (N=68)	SC (N=78)
115.	Deliberately starts fights.	8	5
145.	Shows he does not care about being accepted by others.	8	5
91.	Stutters, stammers, blocks when talking.	6	3
130.	Comments that he is unhappy.	6	3
146.	Expresses feeling that he is left out of things.	6	3
176.	Bites nails.	6	3
151.	Takes out his frustrations on innocent bystanders.	5	2
197.	Corrects others in an obvious manner.	5	2
198.	Deliberately does "sloppy" work.	5	2
58.	Deliberately talks nonsense.	4	1
75.	Expresses peculiar and eccentric ideas.	4	1
153.	Will not speak clearly.	4	1
40.	Unintentionally damages others' property or possessions.	3	0
104.	Chooses to use immature speech, e.g. baby talk.	3	0
147.	Does not protest when others tease or hurt him physically.	3	0
36.	Deliberately talks out of turn.	16	14
74.	Is overly-talkative.	13	11
59.	Tattles on others.	10	8
86.	Exhibits mood shifts: depressed one moment, elated the next.	10	12
81.	Bosses others.	9	7
95.	Stares blankly into space seemingly unaware of his surroundings.	9	7
134.	Picks on others who are smaller or weaker.	8	6
172.	Gossips about others.	8	10
49.	Unintentionally makes loud verbal outbursts at inappropriate times.	7	5
177.	Encourages disobedience.	6	8
186.	Encourages destructive activity.	5	3
152.	Indulges in fantasy.	4	2
159.	Unintentionally hurts other's feelings.	3	1
79.	Prefers to interact with those younger than himself even though others his own age are available.	2	0
112.	Displays eccentric habits, for example, smells everything, plays with urine, feces.	2	4
136.	Worries about sex.	2	0
161.	Fails, unknowingly, to speak clearly.	2	0
162.	Exhibits spasticity, rigidities.	2	0
168.	Lifts or unbuttons other's clothing to touch intimately.	2	0
203.	Is overly-apologetic.	2	0
205.	Is unintentionally absent at inappropriate times.	2	0

Appendix B continued

Item		Frequency SI (N=68)	Frequency SC (N=78)
220.	Deliberately does inaccurate work.	2	4
218.	Criticizes himself unrealistically.	1	3
88.	Deliberately curses and swears.	11	10
90.	Hesitates a long time before making choices.	10	11
6.	Uses obscene language deliberately.	9	10
68.	Manipulates others in order to get them to do what he wishes.	6	5
100.	Purposely works slowly.	6	5
180.	Exhibits nervous behavior such as: nervous tics, muscle-twitching, eye-blinking, hand-wringing.	6	4
175.	Demonstrates annoying curiousity.	5	4
98.	Expresses over-concern about own unsatisfactory performance.	4	5
122.	Expresses high opinion of self.	4	3
126.	Takes out his frustrations by attacking objects.	4	3
127.	Gets upset when he loses in competitive activities.	4	3
188.	Prefers unconventional methods of doing things.	4	5
189.	Gets intoxicated.	3	2
96.	Talks nonsense without meaning to.	2	1
102.	Shows undue concern about having everything exactly right.	2	3
2.	Deliberately exposes private parts in public.	1	0
12.	Unknowingly exposes private parts in public.	1	0
34.	Displays ignorance of table manners.	1	0
132.	Lacks bladder control and wets self.	1	0
140.	Talks of attempting suicide.	1	0
199.	Chooses to wear dirty clothing.	1	0
154.	Takes hard drugs (e.g., heroin).	0	1
171.	Spends all his time at sports.	0	1
184.	Teases others.	19	19
30.	Deliberately avoids behaving in polite and sociable manner.	9	9
200.	Willfully ignores warning of danger.	6	6
138.	In solving a problem, persists in an approach which fails.	4	4
10.	Deliberately destroys his own property or possessions.	3	3
28.	Is deliberately clumsy.	2	2
105.	Worries about impression he makes on others.	2	2
208.	Takes mild drugs (e.g., marijuana).	2	2
46.	Deliberately ignores table manners.	1	1
110.	Uses immature speech, e.g., baby talk.	1	1
124.	Depends on others to see that he wears appropriate clothing.	1	1
210.	Is intentionally sexually promiscuous.	1	1

Note: Eleven items never checked by teachers in either school are omitted. Six were concerned with racial and religious bigotry, crying without reason, reporting nightmares, deliberate pants-wetting; and five referred to extremes such as open masturbation, rape, suicide and homicide.

APPENDIX C

EUGENE INSTRUCTIONS FOR RECALL LISTING

IN-CLASS INSTRUCTIONS

You are participating in a study of how many persons are known to junior high school students. This is a part of a more general inquiry regarding adolescent attitudes toward others. We appreciate your co-operation.

On these sheets of paper which you have received, we want you to start writing the names of all persons you have ever known, persons you have met and talked to and remember knowing, living or dead. Write one name on each line. Do not be concerned about spelling. Nicknames or initials of last names will do, just so that you can recognize the name when you see it again. Do not include celebrities such as TV stars or movie stars, athletes, politicians, etc., whom you may have seen in person or even have autographs from. Include only persons whom you personally know and whom you would expect would also know you.

After you write each name it is important that you fill in a little information about the name you have written. You do this on the same line as the name by circling one appropriate letter in each of the four columns.

The first column is called AGE and has the letters C, S, O, and A. Circle the letter C if your name is a child, someone at least a couple of years younger than you. Circle the letter S if your name is someone approximately the same age as you, a year or two younger or older. Circle the letter O if your name is an older teenager whom you wouldn't say is approximately your age. Circle the letter A if you consider your name an adult.

In the second column circle either the F for female or the M for male.

In the third column called RELATIONSHIP, circle the R if the name you have written is a relative, the F if the name is a friend, the O if the name is a person you know who is other than a relative or a friend.

In the last column called SPEAKING CONTACT, the letters are for approximately how often you see and might talk to the persons on your Recall List. Think about the last year or so you've known this person. This has to be approximate since there are exceptions to most everything, even seeing your own parents. Seeing persons from a distance doesn't count here, only where there is time and opportunity for talking with one another. Circle the D for persons whom you have a chance to talk with most every day, the W for persons whom you have a chance to talk with less than daily but about every week, the M for persons whom you have a chance to talk with less than weekly, but about every month, and the Y for persons whom you have a chance to talk with less than monthly, perhaps only a few times a year or even less.

Appendix C continued

Start writing now unless you have any questions. Since you won't have time to finish your list, you will need to complete it at home. The take-home instructions for completing your list at home are on the next page. You will notice that you may have some help in "remembering" names but that you must do the writing and most important, that every name is someone YOU know or knew.

Also, and this is important, when you are through writing names, you will need to underline the names of at least 12 to 15 persons who are especially important to you. As the take-home instructions tell you, you have 2 days to complete your list and are to leave the envelope with your list inside with your teacher.

TAKE-HOME INSTRUCTIONS FOR RECALL LISTING

We want you to take your lists home and sometime before FRIDAY morning see how many more persons you can remember. We want you to add these names to your lists. It is all right if someone at home (or in school) helps you, except that YOU must write the names yourself and each name must be someone you remember, someone YOU KNOW, or KNEW. Don't worry about spelling. Use nicknames if you prefer, like "Bud" or "Uncle Bob", just so that you know to whom you are referring.

After you write each name be sure to fill in the four information columns on the right side. Use as many of the pages in the booklet as you needed. If you use all of the 20 pages in your booklet, continue your lists on the back of those pages. You'll probably be surprised as to how many persons you actually know and remember. It is not important that you have the longest list but that your list is as complete as you can make it and that you can recognize each name as someone you know.

After you have written all your names of persons you know, you need to add one more thing. Some of the persons on your list are more important to you than are some other persons. That is not the same as liking them best, but that they concern you more. You would expect to remember them better for a longer while. When you finish your list quickly read through all the names you have written and underline the names on your list who are especially important to you. Try to underline at least 12 or 15 names. Don't underline more than 25 names.

You are now through.

Put your completed list in your envelope and leave it with your teacher by FRIDAY morning. You will see me again next week for one last look at your list. In the meanwhile, your list will not be shown to anyone else and will remain private.

RECALL LIST

DATE_____

SCHOOL_____ GRADE_____

NAME_____ AGE___ SEX: M F

	AGE C-Child S-Same as Yours O-Older Teen A-Adult	SEX M-Male F-Female	RELATIONSHIP R-Relative F-Friend O-Other	HOW OFTEN TALK WITH D-Most Days W-Approx. Week M-Approx. Month Y-Few Times a Year or less
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y
	C S O A	M F	R F O	D W M Y

APPENDIX C
(Continued)

GENERAL INSTRUCTIONS FOR RATING RECALL POPULATION SAMPLE

We are going to ask you to give letter grades to the people on the name lists we have returned to you. Each of you has his own list of names made up from the longer list you turned in. What you write here will all be anonymous information. Your own name and all names on your list have code numbers and only the code numbers will be used in preparing your ratings for computer analysis. This study concerns how teenagers think about other persons they know. If we hurry, we can be through with this today.

INSTRUCTIONS FOR RATING RECALL POPULATION SAMPLE

First, check to see that you have the proper list. Your name should be written at the top of the page and your list of names should all be people known to you. Though you know all these persons, you undoubtedly know some better than others. This first page has to do with KNOWING ABOUT OTHERS, how well you think you know these persons.

The first column is called LIFE HISTORY and refers to things which have happened to the persons on your list, how old he or she is, where they were born, their own family, their schooling, places they have lived, jobs which they may have had, and so on. You are to circle either an A, B, C, D, or F in the Life History column next to each name to indicate how well you know that person's life history. An F means you don't really know very much about things which have happened to that person during his life; a D means you know a bit more; a C means you know a fair amount about the person's life; and a B, a lot about him. Circle an A only for persons whom you know a great deal about, someone whose life history is very well known to you. Do this NOW for the first person on your name list.

The second column is called LIKES AND DISLIKES, and is for a different kind of knowing, knowing what pleases the persons on your list and what doesn't please them, what they prefer, what things they like and what things they don't like. Again, an F means that you hardly know what pleases and displeases them; a D that you know a bit more about what they like; a C a fair amount; and B, a lot more. Circle an A only for persons of whom you can be very sure in knowing what different things please them and don't please them. Do this NOW for the first person on your list.

The third column is for still a different kind of knowing and has to do with what persons REALLY BELIEVE and think. Your letter grades will mean how well you think you know this for each person on your list. Circle an F, if you are not at all sure what they believe; a D if you know only a bit more about their thoughts and how they feel; a C if you are fairly sure; and a B, a bit more sure. Circle an A only for persons you can be very sure about in knowing what they really think and believe. Do this NOW for the first person on your list.

Now go on to complete your page of names. Remember, you must circle one letter in each column for each name. Do this as quickly as you can. Don't think a long while about any one person. When you are through, I will tell you how to go on to the next set of ratings.

(Keep a record of how long this takes.)

The second set of ratings is very much like the one you've just finished. Your same list of names is at the left. The four columns at the right all have to do with WAYS OF BEHAVING WITH OTHERS. The first column is labeled FAIRNESS, the second DEPENDABLE, the third DOMINEERING, and the last column SOCIALLY SUCCESSFUL. In each column, you are to circle either an F for very, very low; a D for below average; a C for about average; a B for above average; and an A for especially high. The definitions written on the short page attached to your name list should help you as you make your ratings (give your grades).

(Read these definitions to the pupils as they work with their first name. Remind them that they must circle one letter in each of the four columns for each of the persons on their recall list. Remind them to do this rapidly.)

DEFINITIONS FOR RATING COLUMNS

FAIRNESS - Dealing honestly with others; not taking advantage

DEPENDABLE - Being reliable; doing what was promised or expected

DOMINEERING - Commanding others; insisting that others do what he (or she) thinks; keeps trying to convince others to do what he (or she) says

SOCIALLY SUCCESSFUL - Being liked and respected and admired by others.

Circle C for AVERAGE
Circle B for ABOVE AVERAGE
Circle D for BELOW AVERAGE
Circle A for ESPECIALLY HIGH
Circle F for VERY VERY LOW

App. 16
Appendix C continued
NAME _____

NAME LIST	LIFE HISTORY	LIKES AND DISLIKES	WHAT HE REALLY BELIEVES
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F
	A B C D F	A B C D F	A B C D F

APPENDIX D

LISTING OF QUESTIONS FROM THE SOCIAL ACTIVITY QUESTIONNAIRE

1. a. What meals or snacks do you usually eat at home?
   b. How many times a week do you usually eat these meals or snacks at home?
   c. About how many times a week do you fix the meal or snack at home?
   d. How many times a week do you help someone fix the meal or snack?

2. a. Where do you sometimes eat or drink away from home where people do not pay?

   b. What meals or snacks do you sometimes have at these places?
   c. Who is apt to fix these meals or snacks?

3. a. Do you sometimes visit a cafe, restaurant, drive-in, snackbar, or other eating place where people pay for food or drink? Write the names of the places you visit.
   b. How often do you visit these places?
   c. Who usually orders and pays when you visit these places?

4. a. What work or chores do you do around your house or yard?
   b. About how often do you do these jobs?
   c. Why do you do these jobs?

5. a. Besides working, what else do you do in your free time?
   b. Where do you do these things?
   c. How often do you do these things?
   d. With whom are you apt to be when you do these things?

6. a. Do you attend meetings?
   b. How often do you attend?
   c. What do you do at the meetings?

7. a. Which of these places have you visited?

Airport	Hotel or Motel	Hearing Center
Bank	Post Office	Hospital
Barber	Machine or Appliance Repair Shop	Public Health Court
Beauty Shop	Service Station	Jail
Bus Depot	Shoe Repair	Police Station
Car Wash	Social Security	City Hall
Cleaner	Clinic	
Employment Office	Dentist	
Laundry	Doctor	
Lawyer	Eye Doctor	
Library		

   b. What did you do when you were there last time?

8. a. Name the stores you visit.
   b. How often do you visit them?
   c. What are you most apt to do when you visit these stores?

Appendix D continued

9. a. How do you get around?
   b. How often do you use this transportation?
   c. Are you usually a passenger, or are you the driver?

10. a. What kinds of machines can you operate?
    b. How often do you operate them?
    c. How did you learn to operate them?

11. a. Who are the friends you are most apt to get together with?
    b. Is this friend a boy or girl?
    c. How old is this friend?
    d. How often do you spend at least an hour with this friend?

12. a. How many times a day or a week do you use the phone to call a friend?
    b. How many times a day or a week does a friend phone you?

13. a. When you get together with your friends, how do you spend your time?
    b. Where are you apt to be?

APPENDIX E

SOCIAL COMPETENCY PROJECT-INTERVIEW SCHEDULE

Section I

Time Chart

Can you give us a rough idea of how _____ spends his time on a typical school day and a typical Saturday?

	School Day		Saturday	
	What he does	With whom	What he does	With whom
Gets up:				
7:30				
8:00				
9:00				
10:00				
11:00				
12:00				
1:00				
2:00				
3:00				
4:00				
5:00				
6:00				
7:00				
8:00				
9:00				
9:30				
Goes to bed:				

Appendix E continued

ADOLESCENT RESEARCH PROJECT-INTERVIEW SCHEDULE

Section II. We now want to talk about how _____ gets along with others.

A. First let's talk about how he gets along with kids his own age.
   1. Does he make friends easily.
   2. How many friends easily.
   3. What ages.
   4. With boys, girls.

B. Now let's talk about how he gets along with adults.
   1. With his relatives.
   2. Any special non-relative adult.
   3. Any adult he talks with a lot.

C. Now let's talk about how he gets along with his parents.
   1. How much control over him.
   2. Cooperative about chores at home.
   3. Obeys house rules.
   4. Talks to parents about self.
   5. Invites support, guidance and criticism.

D. How well does he get along with sisters and brothers?

E. Now tell me all you can about how he behaves with other people. (What are his strengths and weaknesses)
   1. Disposition.
   2. Acts grown-up or childish.
   3. Demands attention.
   4. Self-control, temper.
   5. Reliable, dependable; keeps promises.
   6. Sensitive to others' feelings; helpful.
   7. Leader, follower, independent.
   8. How does he get others to do what he wants.
   9. Manners.
   10. New experiences.
   11. Responses to authority, orders.

F. What are his special interests, skills?
   1. Does he keep himself occupied in free time.
   2. Does he stay interested in one thing or shift interests easily.
   3. Gives up if he has trouble.
   4. What are some things he likes to do but has trouble doing.

G. Does he care how he looks?
1. Appropriate clothing.
2. Chooses own clothing; takes care of it.
3. Responsible about clothing, cleanliness and grooming.
4. Takes care of own belongings, room, or area.

H. Does he have any physical or health problem? If so, how long, what affect on social behavior and schoolwork?
1. Eating habits.
2. Sleeping habits.

I. How do you think _____ is getting along in school? Do you talk? Does _____ talk to you about how he is doing in school?
1. Does he like school.
2. What does he like, dislike.
3. Does he get along with teachers.
4. How is he doing in classwork.

J. Junior H.S. kids tend to become more independent from home, do more things on their own. How independent would you say _____ is? As compared to others (boys, girls) his age?
1. Tends to argue for own ideas.
2. Wants to choose own recreation.
3. Earns and spends part of own money,.
4. Prefers to go ahead without adult advice.

Appendix E continued

Section III (Checklist to be completed with help from Parent)

A. How satisfied are you with your child's:

	Satisfied	Generally Satisfied Would Like to See Improvement	Dissatisfied Very Concerned Need Much Improvement
1. Home behavior.			
2. School behavior.			
3. Social relationships.			
4. Attitudes and values.			
5. Disposition.			
6. Dependability.			
7. Goals for the future.			

B. Can you name some of your son's or daughter's friends with whom he spends an hour or more most weeks.

_____

_____

_____

C. Below is a list of possible household chores. Does your son, daughter regularly do any of these?

1. Makes bed.
2. Straightens room.
3. Vacuums.
4. Dusts.
5. Mops.
6. Empties garbage.
7. Burns trash.
8. Sets table.
9. Washes dishes.
10. Wipes dishes.
11. Puts them away.
12. Helps prepare meal.
13. Bathes children.
14. Dresses children.
15. Music practice.
16. Baby sits.
17. Does laundry.
18. Does ironing.
19. Mends, sews.
20. Does schoolwork.
21. Cleans yard.
22. Mows yard.
23. Weeds, cult. garden.
24. Carries wood, sawdust.
25. Washes car, boat.
26. Works on car, bike.
27. Cares for pets.
28. Cares for livestock.
29. Home painting/repair.
30. Cuts wood.
31. Shakes rug.
32. Other.

D. What do you think the school might do about the problems you mentioned? (Social behaviors-refer to IIA)

Appendix E continued

Subject Code: _____
Interviewee : _____
Interviewer : _____
Date : _____
Time : _____

INTERVIEWER RATING SHEET ON SECTION II OF INTERVIEW SCHEDULE

	1	2	3	4	5	Other
A Peers	Very Well	Moderately Well	Fairly Well	Poorly	Very Poorly	Insufficient Information
B Adults	Very Well	Moderately Well	Fairly Well	Poorly	Very Poorly	Insufficient Information
C Parents	Very Well	Moderately Well	Fairly Well	Poorly	Very Poorly	Insufficient Information
D Siblings	Very Well	Moderately Well	Fairly Well	Poorly	Very Poorly	Insufficient Information
E Behavior With Others	Very Well	Moderately Well	Fairly Well	Poorly	Very Poorly	Insufficient Information
G Grooming	Excessive	Adequate	Tolerable	Inadequate	Very Poor	Insufficient Information
I Getting Along In School	Very Well	Moderately Well	Fairly Well	Poorly	Very Poorly	Insufficient Information
J Independence From Home	Very Independent	Independent	Average Indepen.	Somewhat Depen.	Dependent	Insufficient Information

APPENDIX F

INSTRUCTIONS FOR PICTURE INTERPRETATION TEST

Pass out test booklets and pencils. Ask pupils to write their names in the appropriate space. Pupil's code numbers will be entered later.

Begin instructions as follows:

> I am going to show you some pictures and would like you to answer some questions about them. This is not like a test you have in school. (We want to know how 8th graders see the world around them.) The questions and the choice of answers are in your booklet. Let's do the first picture together for practice.

Show Practice Picture, "Man Lying Down", saying:

> This picture is just for practice so you'll know what to do. Look at the first page of your booklet, where the question for the Practice Picture is written. The question is: What is the man doing? Circle the letter next to the answer you think is the best answer. Let's read them together. (READ RAPIDLY)

Continue with:

> Circle the letter next to the answer you think is best. (PAUSE ABOUT 15 SECONDS) All right, how many have circled A? Raise your hands. How about B? C? D? E? Most of you picked A. A is the best answer because it tells more of what is going on. It says more than the man is sleepy or tired. It tells that he is happy to be home. Any questions?

Proceed to test pictures with the following instructions:

> Let's start now. I will read the question, show a picture, and while you look at the picture, I'll read the choice of answers. You are to circle the letter next to the answer you choose. There will be 14 pictures. Let's go quickly. The question for the first picture is: Why are the boys sitting down? (PAUSE) Why are the boys sitting down?

After reading the question twice, show picture # 2. As it is viewed, read each alternative (FAIRLY RAPIDLY) to the class. Pause briefly (approx. 15 seconds) while the pupils circle in their answers. Then say:

> Remember to circle only one answer, the one you think is the best answer to the question. If you need help, raise your hand. (PAUSE) Is everyone finished? O.K. let's go on to the next picture. The question is: What might be happening? (PAUSE) What might be happening? (Show the third picture.)

Read the alternatives, allow about 15 seconds more for the students to make their choice. Continue through the rest of the pictures in the same way, asking the new question as soon as most of the class have made their choice.

PICTURE INTERPRETATION TEST

CODE_____
NAME_____
DATE_____

Picture 1 - PRACTICE PICTURE

Why is the man lying down?
A. He just got home.
B. He's soon leaving for the army.
C. He has been walking a lot.
D. He is very tired.
E. He is lazy.

Picture 2

Why are the boys sitting down?
A. They are tired from walking.
B. They are putting on their shoes.
C. They are getting ready to play football.
D. They want to walk barefoot.
E. They are undressing to go swimming.

Picture 3

What might be happening?
A. They are looking at a map.
B. Their house is being torn down.
C. They have just bought a house.
D. They are building a house.
E. They are moving to the country.

Picture 4

What might be happening?
A. They are waiting in a hallway.
B. They are taking the boy from one room to another.
C. The boy is trying to get up.
D. The boy has just had an operation.
E. They are seeing how the boy feels.

Picture 5

What is happening here?
A. They are in a parade.
B. They are workers on a strike.
C. This is a holiday crowd.
D. They are having a demonstration.
E. It is a funeral.

Picture 6

What do you think the man is?
A. A doctor.
B. A cook.
C. A waiter.
D. A host.
E. A magician.

Picture 7

Why do you think they are holding hands?
A. They are married.
B. They are frightened.
C. They are worried.
D. One of them is sick.
E. They are unhappy.

Picture 8

Where is this happening?
A. In a prison.
B. In a hospital.
C. In a hallway.
D. In a police station.
E. In a school.

Picture 9

What is happening?
A. It suddenly started to rain.
B. They are under the bridge to stay dry.
C. The cars skidded off the road.
D. They are meeting their friends.
E. It is the start of a race.

Picture 10

What is happening?
A. The boys are reading the sign.
B. The boys are looking at flowers.
C. The boys are being scolded.
D. The boys are laughing at the man.
E. The boys are waiting to get their ball back.

Appendix F continued

Picture 11

What is the woman doing?
A. She is bringing him coffee.
B. She is seeing if he's awake.
C. She is waking him up.
D. She is whispering to him.
E. She is checking his work.

Picture 12

Why is the man sleeping?
A. It's early.
B. He's sick.
C. He was up late.
D. He's on vacation.
E. He has forgotten his promise.

Picture 13

What is the boy thinking?
A. How much fun he's having.
B. He's getting new pants.
C. How much the pants cost.
D. What will his friends say?
E. Wishes his mother would hurry.

Picture 14

Why is the man scowling?
A. Doesn't like his job.
B. He's poor.
C. He has a heavy load.
D. He's been drinking.
E. He always scowls.

Picture 15

Why has she quit ironing?
A. She's tired.
B. They've had a fight.
C. He lost his job.
D. He hit her.
E. He's leaving her.

APPENDIX G

SELF APPRAISAL INVENTORY [1]

NAME_____
SCHOOL_____
CODE_____
DATE_____

Directions: Please show whether you agree or disagree with each of the statements on these pages by circling one of the answers next to each statement.

SA=Strongly Agree; A=Agree; D=Disagree; SD=Strongly Disagree

For example:

(SA) A D SD I like cherry pie.

SA A (D) SD I want to be a movie star.

There are no right or wrong answers, so respond to each statement as honestly as you can.

SA A D SD 1. I like to meet new people.

SA A D SD 2. I can disagree with my family without making them mad.

SA A D SD 3. Schoolwork is fairly easy for me.

SA A D SD 4. I am satisfied to be just what I am.

SA A D SD 5. I wish I got along better with other kids.

SA A D SD 6. I often get in trouble at home.

SA A D SD 7. I usually like my teachers.

SA A D SD 8. I am a cheerful person.

SA A D SD 9. Other kids are often mean to me.

SA A D SD 10. I do my share of work at home.

SA A D SD 11. A lot of time I feel upset in school.

SA A D SD 12. I often let other kids have their way.

SA A D SD 13. Most kids don't have as many friends as I do.

SA A D SD 14. No one pays much attention to me at home.

SA A D SD 15. I can always get good grades if I want to.

SA A D SD 16. I can always be trusted.

SA A D SD 17. I am easy to like.

SA A D SD 18. There are times when I would like to leave home.

SA A D SD 19. I forget most of what I learn.

SA A D SD 20. I am popular with kids my own age.

[1] Developed by The Instructional Objectives Exchange of the UCLA Center for the Study of Evaluation.

NAME _____

SA A D SD 21. I am popular with girls.
SA A D SD 22. My family is glad when I do things with them.
SA A D SD 23. I often volunteer in school.
SA A D SD 24. I am a happy person.

SA A D SD 25. I am lonely very often.
SA A D SD 26. My family pays attention to my ideas.
SA A D SD 27. I am a good student.
SA A D SD 28. I often do things I'm sorry for later.

SA A D SD 29. Older kids do not like me.
SA A D SD 30. I behave badly at home.
SA A D SD 31. I often get discouraged in school.
SA A D SD 32. I wish I were younger.

SA A D SD 33. I am always friendly to other people.
SA A D SD 34. I usually treat my family as well as I should.
SA A D SD 35. My teacher makes me feel I am not good enough.
SA A D SD 36. I always like being the way I am.

SA A D SD 37. Most people are much better liked than I am.
SA A D SD 38. I cause trouble to my family.
SA A D SD 39. I am slow in finishing my school work.
SA A D SD 40. I am often unhappy.

SA A D SD 41. I am popular with boys.
SA A D SD 42. I know how my family wants me to act at home.
SA A D SD 43. I can give a good report in front of the class.
SA A D SD 44. I am not as nice-looking as most people.

SA A D SD 45. I don't have many friends.
SA A D SD 46. I sometimes argue with my family.
SA A D SD 47. I am proud of my school work.
SA A D SD 48. If I have something to say, I usually say it.

SA A D SD 49. I am among the last to be chosen for teams.
SA A D SD 50. My family always trusts me.

NAME _____

SA A D SD 51. I am a good reader.
SA A D SD 52. I don't worry much.

SA A D SD 53. It is hard for me to make friends.
SA A D SD 54. My family would help me in any kind of trouble.
SA A D SD 55. I am not doing as well in school as I would like to.
SA A D SD 56. I have a lot of self control.

SA A D SD 57. Friends usually follow my ideas.
SA A D SD 58. My family understands me.
SA A D SD 59. It is hard for me to talk in front of the class.
SA A D SD 60. I often feel ashamed of myself.

SA A D SD 61. I wish I had more friends.
SA A D SD 62. My family often expects too much of me.
SA A D SD 63. I am good in my school work.
SA A D SD 64. I am a good person.

SA A D SD 65. Sometimes I am not friendly to other people.
SA A D SD 66. I get upset easily at home.
SA A D SD 67. I like to be called on in class.
SA A D SD 68. I wish I were a different person.

SA A D SD 69. I am fun to be with.
SA A D SD 70. I am an important person to my family.
SA A D SD 71. My classmates think I am a good student.
SA A D SD 72. I am sure of myself.

SA A D SD 73. Often I don't like to be with other kids.
SA A D SD 74. My family and I have a lot of fun together.
SA A D SD 75. I would like to drop out of school.
SA A D SD 76. I can always take care of myself.

SA A D SD 77. I like to be with kids younger than me.
SA A D SD 78. My family usually thinks about how I feel.
SA A D SD 79. I can disagree with my teacher without getting into trouble.
SA A D SD 80. I can't be depended on.

APPENDIX H

PUPIL OPINION QUESTIONNAIRE[1]

NAME_____
SCHOOL_____
CODE_____
DATE_____

Circle an A, B, C, D, or E beside each statement, depending upon how you feel in each case. Circle ONLY ONE LETTER for each statement.

A. I disagree very much
B. I disagree a little
C. I neither disagree or agree
D. I agree a little
E. I agree very much

A B C D E	1.	Most things about school are all right.
A B C D E	2.	Most school work which pupils have to do is worth the effort.
A B C D E	3.	Most of my classes are enjoyable.
A B C D E	4.	There are many teachers who do not know how to teach.
A B C D E	5.	Pupils who do not do their daily lessons should be kept in after school to do them.
A B C D E	6.	Pupils in school should try to work together.
A B C D E	7.	Most teachers are crabby.
A B C D E	8.	The school is often the reason why pupils are absent.
A B C D E	9.	Every pupil does his part when the class is working together.
A B C D E	10.	We seem to be doing the "same old things" over and over again in school.
A B C D E	11.	It is easy to get along with most teachers.
A B C D E	12.	Going to school is a lot of fun.
A B C D E	13.	As a rule teachers want too much work from pupils.
A B C D E	14.	Going to school is too difficult and discouraging.
A B C D E	15.	Most pupils learn what they have to learn, not because they want to learn.
A B C D E	16.	Most of the things which the teacher does are all right.

[1] Developed by the Kansas City Youth Development Project.

Appendix H continued

PUPIL OPINION QUESTIONNAIRE

NAME_____
SCHOOL_____
CODE_____
DATE_____

A. I disagree very much
B. I disagree a little
C. I neither disagree or agree
D. I agree a little
E. I agree very much

A B C D E 17. Most group work in school does not get very much work done.

A B C D E 18. Teachers are usually too busy to talk with pupils.

A B C D E 19. Most pupils really want to do their school work.

A B C D E 20. Most pupils ask others to join them in their work or play.

A B C D E 21. Most teachers try to force pupils to learn something.

A B C D E 22. Most pupils really enjoy going to school.

A B C D E 23. Pupils really do not learn the things in school that they want to learn.

A B C D E 24. Teachers punish pupils too much.

A B C D E 25. A pupil should do more school work than he has to do.

A B C D E 26. All the popular kids get all the good things in school.

A B C D E 27. Everything in school is too strict.

A B C D E 28. Most pupils really enjoy working with their classmates.

A B C D E 29. Teachers really do not understand children.

A B C D E 30. Most pupils like doing their school work.

A B C D E 31. Most pupils are afraid of their teachers.

A B C D E 32. There are always some pupils in class who do not consider others.

A B C D E 33. Too much of what we have to study does not make sense.

Appendix H continued

PUPIL OPINION QUESTIONNAIRE

NAME_____
SCHOOL_____
CODE_____
DATE_____

A. I disagree very much
B. I disagree a little
C. I neither disagree or agree
D. I agree a little
E. I agree very much

A B C D E 34. Teachers are too bossy.

A B C D E 35. It is hard to make friends in school.

A B C D E 36. Pupils have to keep reading and studying the same things over and over in school.

A B C D E 37. Most pupils would be better off if they never went to school at all.

A B C D E 38. It is all right to be unfriendly to some of the pupils in school.

A B C D E 39. Most pupils would rather work by themselves rather than in a group.

A B C D E 40. My daily school work is full of things that keep me interested.

A B C D E 41. There is little chance to get to know other pupils in school.

A B C D E 42. Most things a person needs on a job are learned in school.

A B C D E 43. One should always think of himself before thinking about others.

A B C D E 44. Teachers care about what is good for pupils.

A B C D E 45. What pupils learn in school is more important than most people think.

A B C D E 46. Having to go to school is like having to go to jail.

A B C D E 47. Teachers pick on some pupils for no reason at all.

A B C D E 48. Most of the pupils in my classes are friendly towards each other.

Appendix H continued

PUPIL OPINION QUESTIONNAIRE

NAME_____
SCHOOL_____
CODE_____
DATE_____

A. I disagree very much
B. I disagree a little
C. I neither disagree or agree
D. I agree a little
E. I agree very much

A B C D E	49.	Pupils are always treated fairly in school.
A B C D E	50.	In most school groups, there are only one or two pupils who are important.
A B C D E	51.	Most pupils feel that they can trust their teacher.
A B C D E	52.	Too much nonsense goes on in school.
A B C D E	53.	Teachers expect too much of pupils.
A B C D E	54.	What pupils learn in school is old fashioned, not new things.
A B C D E	55.	School can be very boring at times.
A B C D E	56.	Some pupils are always making fun of other pupils in school.
A B C D E	57.	There is too much importance placed on grades in school.
A B C D E	58.	Most pupils are not interested in learning.
A B C D E	59.	Teachers always seem to like some pupils better than others.
A B C D E	60.	Pupils do not have very much freedom in school.

APPENDIX I

PORTLAND INSTRUCTIONS FOR RECALL LISTINGS, RATINGS AND ESTIMATES

FIRST DAY
(Approx. 35 minutes needed)

A. Instructions for Recall Listings

As recall lists are passed out begin instructions as follows:

This test is probably different from any test that you've ever seen before. It is not really a test. There are no right or wrong answers. Your job will be to think of the names of the people you see quite often and to give them grades according to how well you get along with them. As you get your paper, write your name on this line (INDICATE) at the top of the paper. Later we will change your name to a code number. What you write on this test will be private information and will not be shown to anyone else. The same code number will be used on the other tests you are taking today and tomorrow.

On the form we are passing out now is the beginning of a list of people you probably know and see fairly often. The first three pages are all the eighth graders in your school. Your name should be somewhere on this list. Find it and draw a line through it. Also draw a line through the names of any eighth graders you don't know. While you are doing this I'm going to tell you what else to do.

You probably know a lot more teenagers than the ones on this list. What I'm going to want you to do first is turn to the end of the teenager list on page three and see if you can finish the page with names of other teenagers you know. But they must be kids you see fairly often, about once a week or more often. They can be friends or not; that doesn't matter. They don't have to be in school either. They could be other kids in your neighborhood or brothers or sisters of your friends, if they're in their teens. But they must be persons you know and sometimes talk with, not TV stars or actors. You don't have to spell their names right - just so you know the name you've written when you see it again. You can use nicknames if you want. You can start writing now; boys on one side (INDICATE) and girls on the other side (INDICATE). Remember we already have typed all the names of the eighth graders in your school so don't write in their names again. Raise your hand for questions. Write fairly quickly since we have only about five minutes for this part.

If some students rapidly finish a page offer them an extra page. Write their names on them first. After five-ten minutes or when most of the class have finished the page stop the class.

Stop for awhile now. Before you get too tired remembering teenagers, I want you to do the same thing on the next page (TURN PAGE) for adults. Again we've started with names of some adults in the school whom you probably know and see about every week. See how many more

Appendix I continued

adults yc ...ld to this page. Remember they can be persons in your neig...borhood or at home, any adults you generally see at least once a week or so. Start writing now. Spell as well as you can, put men on one side and women on the other side. Raise your hand if you have questions.

Allow another five to ten minutes of writing, offer extra paper if needed, and toward the end suggest:

You could go back and add more teenagers' names if you're stuck for more adult names.

B. Instructions for Rating Names

Give instructions for rating names as follows:

Stop now. While you rest your hands let me tell you what else there is to do. You are going to give each person on your list a grade, either A, B, C, D, or F, beginning on page 1 and going through page 4. The grade is for how well you get along with them. The grade does not say if that person is "good" or "bad" but only how well you two get along together. There may be some people on your list that you have known for a long time, and you may have gotten along with them better or worse in the past. But the grades you give these people should say how you get along with them now.

To give a person a grade all you need to do is circle one letter in the column (INDICATE) next to his or her name. Don't write anything in these empty columns (INDICATE). An F is the lowest grade you can circle. It means that you don't get along with that person at all. A D is a little better but it still means that you generally don't get along very well with that person. A C would be for a person you sometimes get along with but not always. A B means you mostly get along pretty well with that person. You should circle an A only for persons you get along with especially well almost all the time.

Start circling the grades on the first page now, first the boys and then the girls. Go as fast as you can -- don't take a long time on any one name and don't skip any name. We will walk around and answer questions as you work.

When all or most are through note the time. Scan each student's paper as you collect it, first for his name and then to see that he has not left parts out.

SECOND DAY

C. Instructions for Estimation Ratings

First return each student's name list to him. Note that the lists will have had both outside columns cut off, leaving one blank column on each side of the listed name. Begin instructions as follows:

Does everyone have the right name list? Don't worry about the part we have cut away. Just check to see that you have the same list you

Appendix I continued

added names to yesterday. Yesterday you gave grades to everyone on your list as to how well you get along with them. Well, today we're going to try something harder. For each name on your list I want you to guess what grade that person would have given you on how well he or she gets along with you. You need to read each name and think how that person would have graded you on getting along with him, either an F for not getting along with him at all, a D for a little better, a C if he would think you sometimes get along with him but not always, a B if he figures you two mostly get along pretty well, and an A only if he would think that you get along with each other especially well most of the time. Write the letter you think in the empty column next to the person's name. (INDICATE) Do this fairly quickly for all the names on your list. Start now. Raise your hand if you have questions.

Allow ten to fifteen minutes for guessing. Record time when most are through. Scan each student's paper as you collect it to be sure no parts are left out.

Recall Listing - Sample Page

NAME _____ DATE _____

CODE _____

1	2	TEENAGERS BOYS	TEENAGERS GIRLS	3	4
A B C D F		George Brown	Joanne Barney		A B C D F
A B C D F		Lewis Crawford	Daisy Caulfield		A B C D F
A B C D F		Steve Crutcher	Darlene Davis		A B C D F
A B C D F		Grover Ellsworth	Laury Enfield		A B C D F
A B C D F		Donald Farmer	Phyllis Holland		A B C D F
A B C D F		Arthur Green	Betsy Hondo		A B C D F
A B C D F		Wilbert Hansfield	Roberta Landers		A B C D F
A B C D F		Tony Haskins	Trilby Monroe		A B C D F
A B C D F		Robert Johansen	Sally Tomkins		A B C D F
A B C D F		Richard Kelley	Gerri Ladlove		A B C D F
A B C D F		Tom Rolfe	Norma Bronson		A B C D F
A B C D F		Sport Stimson	Belle Jay		A B C D F
A B C D F		Jerry Stanfield	Gloria Jones		A B C D F
A B C D F		Dick Thomas	Ina Martino		A B C D F
A B C D F		Gerard Wallace	Charlotte Murphy		A B C D F
A B C D F		Jim Andrews	Donnalee Monte		A B C D F
A B C D F		Lew Billings	Sara Passaway		A B C D F

APPENDIX J

INSTRUCTIONS TO THE TEACHER FOR USING THE DAILY CLASS BEHAVIOR RECORD

The Daily Class Behavior Record is intended to aid the teacher in keeping a survey of the classroom behavior of her pupils which may aid or disrupt the learning process for the entire class.

During the week of _____ the teacher will be asked to rate every student in the class at the end of the school day. Three aspects of classroom behavior are emphasized in this rating scale: doing assigned work, making contributions during the class period, and abiding by rules designed to maintain order in the classroom. In addition, the final (Friday) scale will include categories dealing with the pupil's general adjustment: How well he or she gets along with his peers and with you, his teacher.

Below are the guidelines to be followed for each dimension of behavior on the rating scale; they will help to decide which rating best describes the behavior of the student under consideration as you observed him on that particular day.

Class Preparation: Rate the student:

3 - if he is well prepared.

2 - if he is adequately prepared.

1 - if he is poorly prepared.

0 - if he shows no evidence of any preparation.

NR - if no preparation was required for that day.

Class Contribution: Rate the student:

2 - if the class was much better because he was there; he participated constructively.

1 - if the class was a little better because he was there; he was attentive.

0 - if the class would have been the same without him; he was apathetic.

-1 - if the class would have been better without him; he interfered with the activities.

Appendix J continued

Disruptive Behavior: Rate the student:

2 - if his behavior interrupts class activities, (he talks to others, sings, fights, etc.)

1 - if he engages in some activity that draws attention to himself but does not seriously disrupt class activities.

0 - if he exhibits no disruptive behavior.

On Friday's rating scale, the following categories will also be included:

Gets Along With Classmates: Rate the student:

4 - if he gets along very well with his classmates.

3 - if he gets along somewhat better than average.

2 - if he sometimes gets along with them, but not always.

1 - if he generally does not get along very well with them.

0 - if he seems not to get along with them at all.

Gets Along With Teacher: Rate the student:

4 - If he gets along unusually well with you.

3 - if he gets along with you somewhat better than average.

2 - if he sometimes gets along with you, but not always.

1 - if he generally does not get along with you.

0 - if he never gets along well with you.

Please notice that the points of each rating scale are briefly repeated under each heading on the rating sheet. If you find that you are not absolutely sure of the meaning of each point on the scale, be sure to refer back to the guidelines.

Date_____
Teacher_____
Class_____Section_____

DAILY BEHAVIOR RECORD[1]

STUDENT	CLASS PREPARATION	CLASS CONTRIBUTION	DISRUPTIVE BEHAVIOR	GETS ALONG WITH YOU	GETS ALONG WITH CLASSMATES
	3=good 2=adequate 1=poor 0=none NR=not req'd	2=good 1=minimal 0=none -1=negative	2=excessive 1=slight 0=none	4=very well 3=fairly well 2=sometimes 1=not very well 0=not at all	
Brown, George					
Crawford, Lewis					
Barney, Joanne					
Crutcher, Steve					
Caulfield, Daisy					
Tomkins, Sally					
Martino, Ina					
Andrews, Jim					
Landers, Roberta					
Haskins, Tony					
Ladlove, Gerri					
Hondo, Betsy					
Holland, Phyllis					

[1]First three ratings done Monday through Friday; last two ratings done on Friday only.